

Each Day for the next month or so, I am going to cover one aspect of the inputs for Traders Gift EA and Strategy Optimizer and then I am going to cover Optimizations in depth, Money Management and finally a Battle Plan. At the end of the inputs, I will consolidate all the discussions into one PDF document and make it available at Post #1. Some discussions will provoke comment and I will incorporate all significant points in the final PDF. One point for sure I know will provoke comment is the Stop Loss Multiplier. That's about 1 week away. Continuous Straddle will be another interesting topic.

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### **Lot Size**

Money management can be quite complicated if you take all the options presented and the option to nominate a fixed lot size gives you absolute simplicity in determining the relative values of strategies and filters in your back testing and trading. If you have been used to trading in small amounts such as .01 of a lot then fixing your lot size is the option you have with this input. This means that your Lot Size will remain fixed for every trade and Stop Loss Multiplier will have no effect.

Most MT4 brokers give you the option to trade in any of the major currencies so this means that the value of your profit is directly related to the size of your wager.

The rule of thumb is that a wager of 1 lot gives \$10 (or 10 units of your own currency) per pip gained (a pip is .0001 except JPY .01, Gold .1, Silver .01). So a wager of .01 gives \$1 per 10 pips.

If left at 0, your lot size will be determined by the size of your equity. I would recommend that you do leave this at 0 and use your equity as the determining factor because you are then taking the first step in a money management plan.

### **Risk Basis**

There are 2 possible settings -

0 - the value of your wager will be based on your Equity

1 - the value of your wager will be based on your Stop Loss

Two schools of thought here. If you want to limit your loss to exactly the amount you are prepared to risk, you should select the second option but there is a trap with that. With a very small stop loss this **can lead to high wagers** and in a fast moving market, your Stop Loss may not be filled at your nominated price and the losses could easily exceed the amount anticipated. With a Stop Loss of 10 the wager will be 10 times the size of a wager with Option 0 selected.

By choosing the first option 0, the value of your wager is fixed regardless of your stop loss value and this is a better technique overall in money management. However any stop loss over 100 pips will result in a loss greater than percentage of your equity that you are risking. The reverse applies with stop losses less than 100 pips and is also reduced by any trailing stop loss.

The default Value is 0 and this is the preferred option.

If your lot size is fixed, this setting is ignored.

### **Trade Closure Mode**

There are 3 possible settings

0 - Use Stop Loss

1 - Use Signal Reversal

2 - Use Traders Dynamic Index

The default and recommended option is Use Stop Loss. The Stop Loss can optionally trail your profits and protect any profits once the trade enters positive territory by setting the Stop Loss to Break Even and is a sound money management tool. Using Signal Reversal is an option where an indicator can display distinct reversal signals. The trap in using Trade Reversal is that the signal may not be sustained or you may get whipsawed (that is - fluctuates up and down) around the reversal level.

On back testing and optimization, it has been proven that a Trailing Stop Loss rather than a signal reversal is a better performing consideration. Notwithstanding that, indicators such as RSI do give sound signal reversal indications and it makes for easy monitoring of trades. One advantage of signal reversal is that you will always be in a trade as the signal reversal simply closes one direction of trade and opens immediately another trade in the opposite direction.

Traders Dynamic Index is an indicator using a combination of RSI and Moving Averages which gives an indication of trend and momentum of the market.

Traders Gift uses a 7 period SMA on a 13 period RSI and give a buy indication above 50 and a sell indication below 50. The same problem applies as with Trade Reversal, that is it can be subject to whipsawing.

### **Risk Percentage**

The default value is set at 2%.

It is generally accepted that 2% of Equity represents sound money management practice. With the Lot Size left at 0, you need to have a percentage number in this input. Decimal values are acceptable.

The lot size is calculated on the following basis. 2% of equity of say \$1000 = \$20 (or 20 units of your nominated currency). This amount will buy .02 of a lot (1 lot costs \$1000). Unless your broker deals in micro lots (.001), .01 of a lot is generally the minimum lot size. In other words \$500 would be the recommended minimum bank required at 2% risk.

Bear in mind that the gearing level you have established with your broker will determine the margin requirement and if you are using a margin at 100:1 the margin requirement will be the value of your wager. At 200:1 your margin requirement will be half the value of your wager. The down side of higher leverage is that your equity is depleted faster if the price goes against you. At 200:1 your investment is fully lost after a movement of 50 pips (less with commission and brokerage).

As mentioned in the previous post, if you are determining the value of your wager on Stop Loss, you can start with higher wagers with Stop Losses less than 100 pips. (A pip is 0.0001 except JPY crosses 0.01, Gold 0.1 and Silver 0.01).

### **Stop Loss**

The input for stop loss is in pips. (0.0001 except JPY 0.01, Gold 0.1 and Silver 0.01) . An input of 50 means you are allowing half a cent adverse movement.

When considering the value of your stop loss, you need to take into account what fluctuations you

should be allowing for in pursuit of a successful strategy. If historically the strategy takes normally a number of bars (periods) to be achieved, you need to take into account the Average True Range of the period of the previous trades. Tomorrow I will discuss Average True Range.

The purpose of back testing and optimization is to discover historically what is the best figure to allow for fluctuations and optimize your profit potential. A number of factors can be taken into account such as whether the Stop Loss trails the profit as it rises and whether break even is locked in at a particular profit point.

Stop Loss cannot be guaranteed in a fast moving market and you need to be aware of this. Unlike the stock market, there is **no** guaranteed Stop Loss by paying an extra commission.

Never ever trade without a Stop Loss. This is where the Expert Advisor takes all of the emotion out of a trade. Whilst a Stop Loss covers a particular trade, it does not cover all trades unless you use a specialized EA for this purpose such as the CloseTrades EA. The major mover of the Forex market is News Releases and the volatility around these releases can significantly reduce the ability for your Stop Losses to be filled without slippage.

### **Stop Loss ATR Periods**

ATR stands for Average True Range which is an exponential moving average (EMA) of True Range.

True Range is the **largest** of the range from -

previous candle Close to current candle High  
 previous candle Close to current candle Low  
 current candle high to current candle low

Average True Range is calculated with the value of this input which represents the number of periods for the calculation which is the EMA of True Range.

In effect it is the average value of the size of the bars and can be applied as an indicator value multiplied by a value which is specified in the next input - StopLossMultiplier.

An **example**:

**StopLossATRPeriods** = 14 (that is the average fluctuation over 14 periods) ----> gives a calculated ATR value of **6.22** (pips)

**StopLossMultiplier** = 15

**StopLoss** will be respected at **93** pips.

ATR is based on the current timeframe ie. the chart timeframe to which the EA is attached

You are nominating the **number of periods** - StopLossATRPeriods (in the example it's the average size of the fluctuations over 14 bars)

It is becoming popular as a means of expressing Stop Loss but is not the my recommended means of determining Stop Loss.

It is better served as a numeric value in conjunction with the Stop Loss Multiplier which will be discussed in detail tomorrow.

If the StopLossATRPeriods value is left at zero, StopLossMultiplier takes on a whole different meaning

which will be discussed in great detail tomorrow and it probably the most controversial aspect of the TradersGift EA and most discussed aspect in all forms of staking. Watch this space tomorrow for I have plenty to say.

### **Stop Loss Multiplier**

This value can be used in conjunction with the StopLossATRPeriods which was discussed yesterday as a means of determining the value of a Stop Loss but today's discussion is about using this value on its own (StopLossATRPeriods left at 0).

In this context, **StopLossMultiplier is the multiple that wagers are increased by, when the return expected as a minimum is not realised** (not necessarily a loss, can even be a profit). It is subject to limitations as discussed below.

Hopefully by now, all of you will have read [Post #526](#) and I am indebted to Alex8585 for raising the all important issue of Money Management as a priority in our considerations and for freely giving of his own intellect and expertise.

Just a quick recap on Post 526 which discussed the money management arsenal you have at your disposal and why I regard the Stop Loss Multiplier as a key part of this whole trading tool. The concept of increasing the wager on losing strategies is very contentious and I must emphasise that if you leave the StopLossMultiplier at the default setting of 1, this negates any increase in wager if the result you are looking for is not achieved on a particular trade.

A quick recap on Martingale - this is a system whereby you increase your wager on losses. In its basic form, you double your wager with successive losses on the premise that eventually you will have a win and your profit will equal the value of your original wager. If you set your Stop Loss Multiplier to 2, wagers are doubled in succession if the result required is not attained. This does not necessarily mean that the result has to be a loss but could be a trade that does not meet your profit expectations.

StopLossMultiplier does not have to be 2. It can be any decimal number you require. It can even be less than 1 and that would mean that you can decrease your wager on subsequent results that do not meet your expectations.

Lets look at an example to put things in context and I am going to introduce a variable which I have not yet discussed in detail - Minimum Pip Gain because that setting will dictate when the Stop Loss Multiplier will be activated.

If you set your wager at 1.5% of equity and your StopLossMultiplier at 1.2 and your MinimumPipGain at 30

If on any successive trades you do not gain 30 pips (nett) your next wager will increase in the following progression.

1.5%, 1.8%, 2.16%, 2.59%, 3.11%, 3.73%, 4.48%, 5.37%, 6.45%, 7.74%, 9.29%, 11.15%, 13.38%, 16.05%, 19.25%, 20% (that is the ceiling)

In other words, on that example, 16 failures to reach 30 pips on successive trades. If you reduce your

starting equity you increase that number of 16 and conversely if you increase the value of the StopLossMultiplier, you reduce that sequence. Remember this is just one variable in a whole pattern of trading but is an important element in all the set files which I use. If you don't like it just leave the setting at the default value of 1 and do not optimize the setting.

What in effect this setting is saying to the system, is that I am just waiting for that good profitable trade to come along but I want to be in that position to capitalise when it does in fact appear. Have a look at my Trade Explorers at the top of the page. They are filled with really small results just waiting to capitalise on a good trade. This is caused mainly by the SetStopLossToBreakEven protecting small profits but still increasing the wager by the value of the StopLossMultiplier.

I have purposely capped the maximum value at 20% of equity because Martingale in its basic form will always eventually destroy your capital. If a wager of 20% of capital is lost, the next wager returns to your original % of equity. Also remember we are not in a heads or tails situation where the result is a 100% gain or a 100% loss and that trading, contrary to what may be pushed by some commentators as random, is not that. Give some consideration to Fundamentals (ie. Economic Data, News Releases, Crowd Behaviour, Neural Networks and a full understanding of Fibonacci). This is not a casino where there is always a house edge. Also we are using technical indicators so we potentially have the edge rather than just the random fall of cards, balls or dice.

So Traders Gift and Strategy Optimiser is all about research and analysing what was effective in the near term past and applying it in the near term future. It just so happens I am trying to lead you down a path of your own explorations to suit your own requirements and providing the tool box and some training in your skill set. As you probably realise, I don't have much time for those who just want to jump on the back of published strategies and not develop their own strategies and skill set. Back testing is monotonous but can be rewarding as long as you decide what works and what doesn't.

As I mentioned in Post #526 there are many viewers but apathy being the way it is, most people are just interested in a free lunch with no input or inconvenience for themselves. I personally would like to see some constructive discussion on what I have mentioned because I regard Money Management as far above all other considerations.

### Use Trailing Stop Loss

I can cover this in one word - Yes

If ever there was a good illustration to demonstrate yesterday and today's topic, it is in the post 2 above.

The Trailing Stop Loss is automatically placed the nominated number of pips (the Stop Loss value) below the highest point on a buy trade and reverse for a sell trade. **It is generally moved every 5 pips** (0.0005) increase in price. If the price moves backward there is no adjustment.

There is also one situation where the Stop Loss will not trail and that is when the Set Stop Loss to Break Even cuts in to protect profits. The trail stops at this point and will not recommence until the price moves above Break Even by the value of the Stop Loss pips.

For example - if Set Stop Loss to Breakeven is set at 30 and Breakeven is 1.0000, at 1.0030 the StopLoss Price will be set to 1.0000 (I have factored in a couple of "feelgood" pips). If the Stop Loss value is 80, the Stop Loss will not start trailing again until the price has passed 1.0080.

Trailing Stop Loss gives you the security of maximising your profits by allowing for a pull back up to the value of your Stop Loss. There is another variable yet to be discussed which can progressively decrease the value of your Stop Loss as your profit increases and that is the Decrease Stop Loss Percentage which will be covered in detail in due course.

### **Take Profit**

Expressed in Pips (0.0001 except JPY pairs 0.01 Gold 0.1 and Silver 0.01)

Normally this figure is just expressed as a value but the Take Profit value can also be derived automatically from the value of the Take Profit Multiplier.

If you wish the value to be derived automatically, change the value of the Take Profit Multiplier (default is zero). If the Take Profit Multiplier = 2, that means the Take Profit will be 2 x Stop Loss value and that in effect is setting a Risk/Reward ratio of 1:2 (this will take effect if the Take Profit ATR Periods is left at zero in the same way that Stop Loss Multiplier takes on a new meaning when the Stop Loss ATR Periods is left at zero)

So the thing to remember, is that if you are using a risk/reward ratio as part of your money management, the Take Profit will be set automatically by the **TakeProfitMultiplier** (which can be a decimal value). **It defaults to zero. Any other setting will set the Take Profit automatically.**

When setting the value for Take Profit, bear in mind that at a gearing level of 100:1, you will gain the value of your investment when the price changes by 0.01 (1 cent). At 400:1 gearing level you gain the value of your investment when the price moves in your favour by 0.0025 (a quarter of a cent). Scalping the market means that you are looking for quick profits, something below 0.0010, that is a movement of 10 pips or less. Obviously the return is much less unless the wager is higher. A few years ago, Brokers frowned on scalpers but now they actually don't mind at all. No doubt you have seen the threads devoted to ideas such as just making 5 pips a day.

My advice is to do your own back testing and optimization and see where your money is working most effectively. Trades with Take Profit values around 100 to 200 pips using hourly charts running a number of days seem to be more effective. Short term trading involves more trades which means more costs and entry points can be more critical.

### **Take Profit ATR Periods**

This discussion is very similar to the discussion on StopLossATRPeriods and the same considerations apply.

ATR stands for Average True Range which is an exponential moving average (EMA) of True Range.

True Range is the **largest** of the range from -

previous candle Close to current candle High  
previous candle Close to current candle Low  
current candle high to current candle low

Average True Range is calculated with the value of this input which represents the number of periods for the calculation which is the EMA of True Range.

In effect it is the average value of the size of the bars and can be applied as an indicator value multiplied by a value which is specified in the next input - TakeProfitMultiplier.

An **example**:

**TakeProfitATRPeriods** = 14 (that is the average fluctuation over 14 periods) ----> gives a calculated ATR value of **6.22** (pips)

**TakeProfitMultiplier** = **15**

**TakeProfit** will be respected at **93** pips.

ATR is based on the current timeframe ie. the chart timeframe to which the EA is attached  
You are nominating the **number of periods** - TakeProfitATRPeriods (in the example it's the average size of the fluctuations over 14 bars)

You need to be mindful of the risk of over expectation with profit goals and this method gives you the ability to take into account how the market has been performing over the previous TakeProfitATRPeriods. With optimization, this value and the value of the TakeProfitMultiplier can be optimized and your profit performance will be related to current market conditions.

By using this method, Risk/Reward is take out of the equation and I do recommend that Risk/Reward is a sounder money management consideration. More on that in tomorrows discussion.

### **Take Profit Multiplier**

This value can be used in conjunction with the TakeProfitATRPeriods and used to calculate a Take Profit based on the ATR value as discussed yesterday.

If the TakeProfitATRPeriods is left at zero, TakeProfitMultiplier takes on a new meaning and is used as a means of determining Take Profit from Stop Loss

**In this context, TakeProfitMultiplier is the multiple used to determine the TakeProfit Value from the StopLoss Value.**

Look at it as reward v's risk ratio and it is the recommended method for determining Take Profit for example StopLoss = 100, TakeProfitMultiple = 2.5 gives a calculated value of 250 pips for TakeProfit

This multiple **can be expressed in decimal values (eg. 1.7)** and it is recommended that it always be optimized in conjunction with StopLoss and StopLossMultiple to form the basis of a money management plan. You will often hear of risk/reward ratios being discussed and this multiple is the reverse of that ratio. Generally it is accepted that that the R/R ratio never be greater than 1 and for you that means that the multiple minimum should never be less than 1.

There are an additional three considerations in the money management plan and they will discussed over the coming 3 days -

Set Stop Loss To Break Even,  
Minimum Pip Gain,  
Decrease Stop Loss Percentage

**Set Stop Loss to Break Even Pips**

This is probably one of the least understood settings and involves a lot of time with support issues.

Here is a quick example and I will discuss it after the example.

Buy Trade at 1.0000. SetStopLossToBreakEvenPips = 30

At 1.0032 (the 2 pips is representative of the spread), the Stop Loss is moved to 1.0002. In other words you will no longer make any loss on that trade.

This does need further explanation however. If your original Stop Loss was 80 and had been trailing up to this point, it will cease to trail at 1.0032 and will only commence to trail again at 1.0082 and that is the part that its being misunderstood. In other words there will be no movement of Stop Loss between 1.0032 and 1.0082. The integrity of the value of Stop Loss is being protected but more importantly your capital is being preserved in the interim and you will, in the worst case scenario, break even. Once the price moves above 1.0082, the Trailing Stop Loss will recommence.

When you look at the EA's in Trade Explorer and on the website, you will see that the bulk of trades are affected by this setting. So what you are in fact achieving, is preservation of capital just waiting for the opportunity of that killer trade. In most of the examples, this does mean that the wager will be increased on the next trade in accordance with the Minimum Pip Gain setting, the subject of tomorrow's discussion.

FOOTNOTE: I have factored in programmatically a couple of "feel good" pips. That is you will come out with a minimal profit when the SetStopLossToBreakEvenPips cuts in. This couple of pips cannot be changed.

**Min Pip Gain for Reset**

This setting represents the number of pips that you wish to have regarded as a sufficient Profit to have the Wager reset to the original value.

An Example -

Buy Trade at 1.0000.

StopLoss = 80,

StopLossMultiplier = 1.7

Trailing Loss is enabled

BreakEvenPips = 30

MinPipGainForReset = 50

Price reaches 1.0032. BreakevenPips setting sets the StopLossPrice to 1.0002 (spread of 2 is considered)

Note: The above step and the 1.0082 level below are only mentioned to consolidate on yesterdays discussion regarding Break Even.

Price increases to 1.0092. At 1.0082, StopLoss again starts to trail. At 1.0087, StopLossPrice is set to 1.0007.

Price retraces slowly back to 1.0007 and the trade is closed at 1.0007.

Nett result is 5 pips which is below the setting of 50 pips for the reset of the StopLossMultiplier therefore the next wager is increased by 1.7

**Essentially it is the minimum result needed to reset the wager to the opening value, otherwise the**

**next wager will be multiplied by the value of the StopLossMultiplier.**

The value for this setting is best calculated by optimization.

### **Decrease Stop Loss Percentage**

This is the percentage that your stop loss will be decreased whenever Trailing Stop Loss is reviewed.

An Example

Buy Trade at 1.0000

StopLoss 80

DecreaseStopLossPercentage 5

At 1.0007 (allowing for spread of 2)

Stop Loss Price will be moved from 0.9922 to 0.9927 and StopLoss will be changed to 76 (95/100 of 80)

At 1.0012

Stop Loss Price will be moved from 0.9927 to 0.9928 and StopLoss will be changed to 72 (95/100 of 76)

This concept is to allow for a scaling back of Stop Loss as profit increases and forms a quasi scaling back of exposure in the trade. If the trade was to continue for an extended period eventually the trade would close because the stop loss would end up  $< 1$  but most probably the Take Profit would have been achieved by this stage. You should just view it as scaling back of the Stop Loss value as profit increases.

This completes the arsenal of Money Management techniques and in fact, forms the backbone of the Traders Gift EA. The increase in Wager on successive trades with results less than the Minimum Pip Gain is contentious and if you are uncomfortable with it, you don't need to use it. Just set StopLossMultiplier to zero.

My recommendation is that you use at the very least StopLossMultiplier and TakeProfitMultiplier (optimized values) and the default values of SetStopLossToBreakeven = 30, MinPipGain = 30, & DecreaseStopLossPercentage = 5 for your trading with the EA and preferably the last 3 values also optimized.

The current CCI Vol strategy is a great example of these techniques in action. Only 2 days ago we were lamenting the \$10,000 loss in this strategy.

### **Other Inputs**

**Maximum Slippage** - is the amount that you will allow the Trade Price to change from the value at time of request for a trade and the value of the price that you receive. In a fast moving market, the price can move very quickly and this is a means of restricting the Price movement. Expressed in Pips (0.0001 except JPY 0.01, Gold 0.1 and Silver 0.01)

**Maximum Spread** - is the maximum difference in Pips between Buy and Sell Price existing at time of trade that you will accept.

**Nominal Spread** - is the allowance in Pips that is made for the difference between Buy and Sell Price for

back testing and optimization.

**Magic Number** - This is the unique number that identifies trades associated with a particular EA. It must be a different number for each chart to which the EA is attached. A trade is totally identified by the Account Number and the Magic Number. Whilst not needed in Back testing and Optimization, when a set file is saved the Magic Number can be recorded and loaded automatically when trading using a Set file and is independently set when using the Auto version of Strategy Optimizer.

**Message** - This is the message that is seen in the comments column of the Trade Log and Account History in the Terminal Section of MT4. Traders Gift EA automatically inserts the currency pair and "Buy" or "Sell" and then this message. These columns are hidden by default and must be enabled by right clicking in the column headers area. Very useful in determining profitable EA's within an account running multiple EA's.

**Trading Mode** -

Automatic Trading. The default value.

Advisory only - messages only are provided

Discretionary Trading - Prompts are given On Screen. With 2 Options - OK will automatically make the applicable Buy or Sell trade, Cancel will not make any trade.

**Advisory Mode** - is the method of delivery of messages - default is on screen prompts however delivery can be made by email including text messages to mobile phones. The setup is under Tools, Options, Email in MT4. Setting up text messages can be tricky and I would advise using Google for help.

**This is the beginning of the daily topics on the 12 Strategies and 9 Filters.**

**Common to all strategies** is the ability to specify when the condition will be fulfilled. The default setting is a cross on the last completed bar which gives the buy or sell signal, but the signal can be satisfied within the last n bars (the end of the range defaults to 5 but can be extended if required). If this value is set to, for example 5, any cross within the last 5 bars will provide the signal. If n=0 then the current bar will be used for the calculation and is not recommended.

If **multiple strategies** are being used, **ensure that the look back bars of at least one indicator is expanded out beyond 1**, because simultaneous crosses really restrict the number of trades taking place.

The concept is that we are looking to optimize the variables which determine the buy or sell signal over a particular time period in the past. I do recommend that you only look at the immediate previous 3 months as the behaviour of the market is constantly changing and any information you draw from 1 year ago may be no longer relevant. You just need to look at all the EA's that have been marketed and the majority will not stand the test of time. By default only the variables used in the calculation are selected for optimization when a particular strategy is selected.

The **look back periods are not selected by default for optimization** and the time should normally be left at 0 which is the currently selected timeframe. I may in the future give you the ability to select multiple time frames for the same indicator. If you need a different timeframe than the selected timeframe for the overall optimization, you can nominate another timeframe in minutes. Beware that optimizations only indicate what has happened in the past (hence the term "curvefitting"), and forward testing is recommended for confirmation

**EMA Cross**

EMA Cross is the cross of a short exponential moving average and a long exponential moving average. By itself, it is not very effective, since EMA cross is a lagging indicator (it is representative of past price action) but can be used in conjunction with other indicators as confirmation of other signals.

**Price EMA Event**

The terminology was changed from cross to incorporate signal confirmation by referencing the position of price in relation to a exponential moving average. Some strategy considerations reflect for example, the price being above of below the 200EMA and the position selection accommodates this type of consideration and can also be optimized for value of the EMA. The default option is to provide a signal on the basis of a price and EMA cross.

There is also provision to shift the value EMA signal forward to reflect a more real time situation rather than a past situation. The most common shift value is 2.

I received a request very early in the thread to include the Heiken Ashi calculation in the value of the close price which is calculated on the basis of  $(\text{Open} + \text{High} + \text{Low}) / 3$ .

As with EMA Cross, Price/EMA Cross is not really a profitable strategy on its own and Price/EMA Position is normally used in conjunction with other indicators.

**Relative Strength Index**

RSI is a measurement of the Exponential Moving Average of the Average Gain / Average Loss (expressed as a percentage) over of a particular number of bars.

For example: If in a 14 bar period there were all gains, then the RSI(14) would be 100 and with all losses the value would be 0. This type of indicator is known as a momentum indicator and is a good measure of the strength of the market. Of particular importance is the direction of movement and it is generally accepted that the indicator moving down from a high level indicates a selling trend and moving up from a low level indicates a buying trend. A reading over 50 indicates buying pressure and a reading below indicate selling pressure. **Peak and troughs moving in the opposite direction to price is known as divergence and can indicate imminent price reversal.**

When carrying out optimizations the RSI periods, Bottom Level and Top Level are variable and the RSI passing through the levels form the basis for Buy and Sell signals and this indicator is recommended as a reliable indicator for buying and selling pressure particularly over longer timeframes.

Refer to [Post #1457](#) for discussion on Lookback Bars and Timeframe

**MACD** - Moving Average Convergence/Divergence Oscillator

This indicator is created by subtracting a shorter EMA from a Longer EMA to form a MACD line. (commonly EMA 12 and EMA 26)

The values of this line are then averaged by an even shorter value to form a Signal line. (commonly EMA 9)

The difference between the values of the MACD line and the Signal line are normally displayed as a histogram.

When the short EMA crosses above the Long EMA the MACD has a value of 0 and this indicates buying pressure and reverse for selling pressure.

The signal line cross over of the MACD line is generally regarded as an earlier indicator of price movement and the histogram will be crossing the zero line at this point. **Traders Gift uses the Signal Line cross down over the MACD Line as Buy signal and the reverse for a Sell signal.** It is recommended that the Short, Long and Signal values all be optimized.

Like the RSI, divergence occurs when lines joining the troughs (rising) or peaks (falling) form an opposite indication to price movement and this is indicative of price reversal.

Refer to [Post #1457](#) for discussion on Lookback Bars and Timeframe

**STOC** - Stochastic Indicator is an indicator which shows the **relative position of the referenced price to the highest High and lowest Low over a specified number of bars.** It is expressed as a percentage and like the MACD is an oscillator which is meant to indicate the turning point of price. This is known as the Fast%K or **K Period**

This Fast%K value then has a slowing EMA applied to it known as the Slow%K or the **Slowing Period**  
The Slow%K then has a further slowing EMA applied to it also known as the Slow%D or **D Period**

Traders Gift interpretation is -

**cross down of the D Period below the Slowing Period** and having a value  $\leq 20\%$  as a **Buy signal**

**cross up of the D Period over the Slowing Period** and having a value  $\geq 80\%$  as a **Sell signal**

It is recommended that all these values be optimized using back testing with relatively low values hence the End Value of 8 for the K Periods but can be optimized for longer periods if required.

Refer to [Post #1457](#) for discussion on Lookback Bars and Timeframe

**Bollinger Bands** - normally consist of 3 lines on a chart.

The middle line is a 20 Day (default) Simple Moving Average of Price

The upper line is displaced upwards from the middle line by a value of 2 times (default) the Average price deviation over the same number of periods

The lower line is displaced downwards from the middle line by a value of 2 times (default) the Average price deviation over the same number of periods

Because this deviation average varies from bar to bar the width of these channels will vary.

There are numerous ways of interpreting Bollinger Bands, however Traders Gift makes a simple assumption that when the **price closes above the top band** that this indicates strength of price and a **buy signal is generated and the opposite for a close below the bottom band**.

The values of the number of periods and the deviation are recommended to be optimized.

For more information on any indicators, I suggest you refer to [http://stockcharts.com/school/doku.p...cal\\_indicators](http://stockcharts.com/school/doku.p...cal_indicators)

Refer to [Post #1457](#) for discussion on Lookback Bars and Timeframe

**PSAR** Parabolic Stop and Reverse

This indicator trails below the price in a rising market and above the price in a falling market and is perceived the same way as a trailing stop loss. When the price reverses the PSAR value will cross the price value. The size of each **Step** is called the acceleration factor and the default starting value is normally .02 and every time a new high is made in a rising market it increases a value based on the previous value of the indicator and a factored **Step** increment based on the Price movement multiplied by the Step value up to a Step **Limit** value default of .20

I know this is rather complicated and the math is of no concern and just view it the same way as a trailing Stop Loss. At some point, the price will reverse to meet the trail. When that cross occurs, a Buy or Sell signal is generated. That is -

When the **PSAR value crosses to below the Close Price** on the bar in question (default of last bar) a **Buy signal** is given.

When the **PSAR value crosses to above the Close Price** on the bar in question (default of last bar) a **Sell signal** is given.

The problem it is a lagging indicator and is recommended that it be used in conjunction with other indicators.

Optimization of the Stop (**Limit**) value and the size of the Increment (**Step**) is recommended.

For more information on any indicators, I suggest you refer to

[http://stockcharts.com/school/doku.p...cal\\_indicators](http://stockcharts.com/school/doku.p...cal_indicators)

### **Time and Day**

This filter enables you to set the trading days and/or times that you will allow trading signals to be given. Outside these hours and days, no buy or sell signals will be given even if enabled strategies or filters give a signal. The times are based on MT4 time.

UTC to GMT Offset = 2

An Example -

TradingHoursStart = 11

TradingHoursEnd = 18

TradingDaysStart = 2

TradingDaysEnd = 4

Signals will only be given from 9am to 4pm (UTC) on Tuesday to Thursday.

To trade all Days - leave Day settings as default, 0 and 5

To trade all Hours - leave Hour settings as default 0 and 23

### **Straddle**

A Straddle is a combination of 2 pending trades (a Buy Limit and a Sell Limit) placed in any 1 of the 3 following scenarios.

1. At a particular time - for example a scheduled news event (normally place 1 minute before). If the **Day and the Time** is required, leave the Hour at -1 and use the inputs from Time and Day to specify **both Time and Day** (Use same start and end times).
2. At a particular price - normally a significant price level - eg a whole number, support/resistance price or Fibonacci level.
3. At a particular indicator cross - this will be set by setting another strategy also, and instead of a buy or sell trade, 2 pending trades will be placed.

The gap between the existing price (when one of the scenarios above occurs), and the trade activation price is determined by the value of the **Straddle Buffer**. That is when the price moves the amount of the buffer value (in pips - normally 0.0001), a buy **or** sell trade will be automatically activated and the other pending trade automatically cancelled.

This type of trade can be placed on any timeframe chart and in the case of 3 above, the timeframe of the indicator being used would determine the chart timeframe.

**Continuous Straddle** This is probably one of the more unusual strategies in the Traders Gift EA in that it does not rely on any technical indicators. This EA works on a continuous basis and opens 2 pending trades immediately when there are no existing trades. The trades are activated on the basis of price movement after the 2 pending trades are opened. One is a Buy Stop trade and the second is a Sell Stop trade.

An example -

Current Price is 1.0000 and there are no active trades on the chart.

With a Continuous Straddle Buffer of 20,

Two trades are opened -

A Buy Stop for 1.0020 and a Sell Stop for 0.9980

Price moves to 1.0020. Buy trade is filled and Sell Stop is cancelled.

In effect this strategy is saying, I don't know which way the price will go but I will have a bet each way and if the price goes one way by a certain number of pips called the Buffer, I will open a trade at that point in that direction and close the other pending trade at the same time.

The trade is managed according to the money management principles used, and this is one strategy where I suggest you optimize all money management factors except Take Profit (which will be managed by the Take Profit Multiplier), StopLossATRPeriods and TakeProfitATRPeriods. The buffer value should also be optimized as each Currency pair has its own characteristics. Use a 1 minute timeframe for optimization.

This trade can be placed on any chart and the EA will continually monitor for trade closure to open new pending Straddle trades.

This is the only Strategy that cannot be used in conjunction with other Strategies and Filters.

This type of trade can be a hit or miss and is the type of trade that needs to be used over a basket of Currency pairs with and it is not recommended persisting with unprofitable pairs. The EA can be tweaked with optimization and a viewing of the optimization graph within MT4 can help, by looking carefully at the customizable X and Y values with a right mouse click.

Today I have started a demo viewable at [http://tradersgift.com/Established\\_Strategies\\_Demo.html](http://tradersgift.com/Established_Strategies_Demo.html)

In particular, I would suggest you view the performance of the individual currency pairs by clicking on the chart and looking at the advanced statistics table clicking on the Summary tab

Refer to [Post #1457](#) for discussion on Look back Bars and Timeframe

**CCI** - Commodity Channel Index is an indicator which compares the current price to average price over a particular number of periods and provides oversold or overbought signals.

The formula is

$$CCI = (\text{Typical Price} - N \text{ periods SMA of Typical Price}) / (.015 \times \text{Mean Deviation})$$

N is the number of periods for the calculation

Typical Price is the average of High + Low + Close

Mean Deviation is the average of the deviations over the same period

The CCI can vary between lower than -100 to greater than +100

Traders Gift interprets a Buy signal when the CCI crosses up through -100 and a Sell signal when the CCI crosses down through +100 so behaves similarly to the RSI crossing upper and lower levels. As such it is a leading indicator which provide advance notice of momentum in either direction.

It is recommended that the number of Periods be optimized.

Refer to [Post #1457](#) for discussion on Look back Bars and Timeframe

**ADX** - Average Directional Index. This indicator is one of the few indicators which measures the strength of the currency pair but not the direction of movement. A reading above the minimum level can either be Buying or Selling pressure. It looks at the directional movement both higher and lower on a per period basis and divides each by the trading range and takes the absolute difference of each result all smoothed over N periods and factored to give a result between 0 and 100.

The end result is an indication of market strength and generally is interpreted by buy and sell decisions being made on the basis of a reading 25 and over. That is to say that a reading below 25 indicates that the direction of the currency is not particularly well defined.

Traders Gift gives you 2 possible interpretations,

1. Cross - The ADX value moving upwards through the minimum level for a buy signal and the reverse for a sell signal **or**
2. Position -The ADX value being above the minimum level for confirmation of a trade.

It is **recommended that the second option - Position be used as a confirmation of either a buy or sell signal in conjunction with another indicator.**

The ADX Periods and Minimum Level can both be optimized.

Refer to [Post #1457](#) for discussion on Look back Bars and Timeframe

**ATR** - Average True Range which is an exponential moving average (EMA) of True Range.

True Range is the **largest** of the range from -

previous candle Close to current candle High  
 previous candle Close to current candle Low  
 current candle high to current candle low

Average True Range is calculated with the value of this input and is calculated from the the number of periods which is the EMA of True Range.

**In effect it is the average value of the price movement per bar**, and is similar to ADX discussed yesterday in that is **indicative of momentum** rather than the direction of Price.

This type of strategy is normally indicative of a breakout from a trading range and can be used for example at the end of a quiet Asian trading session. Because false breakouts do occur frequently, the inputs - Periods and Number of Pips per bar are both suggested to be optimized and used in conjunction with another Strategy which gives direction of movement.

Refer to [Post #1457](#) for discussion on Look back Bars and Timeframe

**ZIG ZAG** This indicator gives a broader picture of Price Action and is defined by 3 parameters which define the steps (zigzag lines) drawn on a chart

Depth - which is the minimum number of bars to be considered for a step.

Deviation - the minimum price change for a new step to be considered.

Backstep - the minimum value of a pullback to be considered for a reversal.

This indicator is a trend following indicator and **really has no predictive value** but can be used as a pull back type of indicator as in an **ABC type of trade** where A is the top of the initial rise, B is the pull back and C is the point level with A beyond which is deemed to be a buy signal (reverse indication for a sell signal). It can give indications of channels when the Deviation value is set as the size of the channel and can also be helpful in identifying head and shoulder, double top and bottom price patterns.

**Traders Gift gives a Buy and Sell signals as in the ABC types of trades** described above and optimization of the Depth, Deviation and Backstep is recommended.

**News** - News events have a significant impact on currency trading and Traders Gift EA offers a facility to avoid placing trades around news events because the markets can be very volatile and common indicator readings may have no impact around these events and therefore be of little use.

**There are 3 news avoid times which optionally can be specified.** Within the times specified, no trades will be placed even if another enabled strategy gives a signal.

The default Hour setting for the 3 optional news events is set to -1 and each event will be overlooked as long as this value is still set. Any other value for Hour between 0 and 23 will be respected as a news time to be avoided. The minutes can be nominated between 0 and 59 and will also be respected as long as the hour is not -1.

AvoidMinutesBeforeNews and AvoidMinutesAfterNews default to 0 but I would suggest at least a value of 30 for both to avoid significant impact.

**Pivots** - This filter is a check against the previous days trading to see if price is close to the significant support and resistance points, S3, S2, S1, PP, R1, R2, R3 where S = Support, PP = Pivot Point and R= Resistance

If the price is within the buffer value, the trade will be rejected even if another enabled strategy gives a trade signal. The calculations are based on the previous day ending at UTC time of 0000 and are as follows.

$PP = (\max + \min + \text{close}) / 3;$

$R1 = (2 * PP) - \min;$

$S1 = (2 * PP) - \max;$

$R2 = (PP - S1) + R1;$

$S2 = PP - (R1 - S1);$

$R3 = (PP - S2) + R2;$

$S3 = PP - (R2 - S2);$

For example -

S1 = 1.0000, Buffer = 5, Price = 1.0002, Trade will be rejected because price is less than 1.0005

S1 = 1.0000, S2 = 0.9970, Buffer = 5, Price = 0.9980, this filter will not reject the trade.

R1 = 1.0000, Buffer = 10, Price = 0.9992, Trade will be rejected because price is greater than 0.9990

S1 = 1.0000, S2 = 1.0030, Buffer = 10, Price = 1.0015, this filter will not reject the trade.

It is suggested that the Buffer value be optimized.

**Fibonacci** - is a sequence of numbers where the next number is derived by adding the most recent number to the current number.

So a sequence would be 1,1,2,3,5,8,13,21,34,55. This replicated in nature by the growth of items such as shells where the ever increasing spiral generates an extra quarter circle by added the previous number to the current number. Behaviour in the market is deemed to mimic the behaviour of nature. When the market declines or grows, the progression or regressions are viewed in these quarter circle steps so a retracement back to a previous level say from 13 to 8 is deemed as a 38.2% retracement which is the ratio of  $(13-8) / 13 * 100$ . A retracement by 2 steps is  $(13 - 5) / 13 * 100$  which is 61.8%.

The 38.2% and 61.8% retracements are defined as significant support levels to a lesser extent, the half way point of 50% is also a support level and the 100% retracement is also a support level. There are also similar resistance levels on the upside if the price only falters slightly and continues to rise.

For example -

38% retracement = 1.0000, Buffer = 10, Price = 1.0006, trade will be rejected because price is less than 1.0010

62% retracement = .9970, Buffer = 5, Price = 0.9980, this filter will not reject the trade because it is outside both buffers (1.0000 -.0010 and 9970 + .0005)

Traders Gift recognizes the Support levels as potential levels to be regarded in a similar manner to Pivot

levels discussed yesterday and provides a **filter to disregard trades approaching these significant levels** when other enabled Strategies may give buy or sell signals. As with Pivots, the **Buffer** value is best optimized with each Currency pair along with the number of **Lookback** bars to be considered when looking for maximum and minimum prices.

**Support and Resistance** - These terms refer to significant levels in the past that have proven to be potential turning points in price. They can be as mentioned in the previous 2 daily discussions, Pivot Levels or Fibonacci levels but specifically **this filter identifies price channels whether they be ascending, descending or horizontal** channels that represent the upper and lower levels of price movements within the last N bars where N is the **Lookback Bars**.

As with Pivots and Fibs, the allowable buffer before the filter cuts in, is the **Pips Buffer** and if the price is within the buffer, the trade will be rejected even if an enabled strategy gives a trade signal.

To conclude the last 3 topics regarding Support and Resistance, give consideration to a **Price based Straddle** with sufficient buffer to allow for a pull back if you consider that a break of support and resistance may involve a significant price movement.

**Divergence** This is a situation where the line joining the peaks of a momentum oscillator such as RSI or MACD in a rising market forms a downward line or the line joining the troughs on a falling market forms an upward line thus giving a direction opposite to price movement. This is indicative of a price reversal and is a reliable indicator. The oscillator is simply indicating that momentum in the direction of price is showing signs of exhaustion.

In Traders Gift, it can be used in conjunction with other indicators as a confirmation of a pending price reversal. You only need to nominate the Lookback Bars to take into account to find divergence. This indicator is reliable over all timeframes but is recommended at time frames 60 min or greater.

You can optimize the value of the Lookback bars but I would suggest values above 40.

**Candlesticks** - Traders Gift EA and Strategy Optimizer recognize the following candlestick formations

BullishEngulfing  
 BullishPiercingLine  
 BullishKicker  
 BullishHarami  
 BullishAbandonedBaby  
 BullishMorningStarDoji  
 BullishInvertedHammer  
 BullishThreeWhiteSoldiers

BearishEngulfing  
 BearishDarkCloudCover  
 BearishKicker  
 BearishHarami

BearishAbandonedBaby  
 BearishEveningStarDoji  
 BearishShootingStar  
 BearishThreeBlackCrows

For descriptions of the patterns, I suggest you visit this site -  
[http://stockcharts.com/school/doku.p...ern\\_dictionary](http://stockcharts.com/school/doku.p...ern_dictionary)

**The bullish patterns generate buy signals and the bearish patterns generate sell signals.** The pattern completion is taken to be completed at the last completed bar if the default MaxBarsAgo setting (Lookback Bars) is left at 1. I would suggest if you are looking at this filter in conjunction with other Strategies that you expand the setting out from the default of 1.

**It is possible to combine some Settings and have no defined Strategies and this is one of those cases where a Filter such as Divergence could be combined with this Filter (expand the MaxBarsAgo out to 5).** That way the completed patterns can occur anywhere with the the last 5 bars. Some of the patterns take up to 5 Bars to form the completed pattern and this is automatically taken into account.

**Volume** The term Volume is a misnomer. It should really be called number of trades and is indicative of the number of orders and does not reflect the total order size. That is one trade of 20,000 is counted the same way as one trade of 20,000,000,000.

Having said that, an **increasing volume is indicative of increasing interest** whether it be Buying pressure or Selling pressure. **Traders Gift gives a confirmation of a Buy or Sell signal from another Strategy if the Volume is increasing and this filter is enabled.**

If the volume does not increase from the second last bar to the last bar, any trade indicated by a Buy or Sell signal from another Strategy or Indicator will be invalidated.

Today's Discussion:

### **Setting Up Optimizations** -

Firstly a discussion on the need for optimizations. Each currency pair has an individual average daily trading range. So if you are on a long term trading plan, you need to account for the daily fluctuations. Similarly for other trading plans you need to account for the normal ebb and flow of market movement. What may be a 200 pips movement of GBPUSD is only represented by a 90 pip movement of the NZDUSD, so any pip setting in your Strategies needs to be optimized for the currency pair that you are using. Similarly a 10/30 EMA crossover on GBPUSD has a different implication to a 10/30 EMA crossover on NZDUSD and that is why all indicator readings need to be optimized for each currency pair.

What is particularly significant also is that we are only determining what has worked well in the past and of course that may not work as well in the future. The term "curve fitting" relates to getting the best possible return off previous market movements and applying them to future trading. Some indicators do

have standard settings such as MACD 12,26,9, & RSI 14 & 200 EMA but the purpose of optimizations is to find out what is reliable over independent periods in the past. My own theory is that it is a constantly changing ball park driven primarily by fundamental economic factors. There are some age old Support and Resistance levels such as Fibonacci and Daily Pivots.

Over the last 4 months, the published Optimization, MACD Candle, has had a great run on the optimization figures from 1 Nov 2014 to 31 Jan 2015 but it looks like those figures may have had their run and that is why I suggest optimizing on the last 3 months figures alone. Not only does it cut down on optimization time, but for example, what was US monetary policy or the state of Greece's borrowing from the EU 2 years ago, has zero bearing on the economic situation today. So what I am saying to you is that **current technical indicator values reflect the thinking in the current economic situation** and that is why we need to constantly re optimize.

Traders Gift gives you an alternative means to carry out your optimizations and both MT4 and Strategy Optimizer optimizations are covered in the 2 videos here.

MT4 Optimizations

Traders Gift Optimizations.

How to make effective use of Optimizations - If you have 10 factors to optimize, there are 10 billion potential scenarios to calculate. Bring that back to 8 and you have 16.8 million and 6 you have 46,700 so it is very clear that if you can reduce the number of variables and significant time saving can be made. There some rule of thumb figures from experience I can provide. Based on an exchange rate of 1.0000, RSI 14, MACD 12,26,9 EMA 20/60 and nearly all of the standard settings as recommended for indicators need not be optimized. So for currencies like USDCHF which are close to that figure of 1 these settings can be left as is. However when you are considering USDGBP these settings need to be adjusted.

Some of the money management variables can be left as is with smaller impact on the final balance. At an exchange rates near 1, SetStopLossToBreakEven = 30, MinPipGain = 30, DecrStopLossPercentage = 5.

Percentage of Equity may need to be optimized with SL Multiple but to save time, 2% is a safe setting.

My own recommendations. Timeframe 60 mins

Percentage of Equity 2%

Optimize Stop Loss

Optimize Stop Loss Multiple

Optimize Take Profit Multiple (Take Profit will be set automatically by this multiple)

Breakeven 30 pips

Min Pip Gain 30 pips

### Decrease Stop Loss Percentage 5

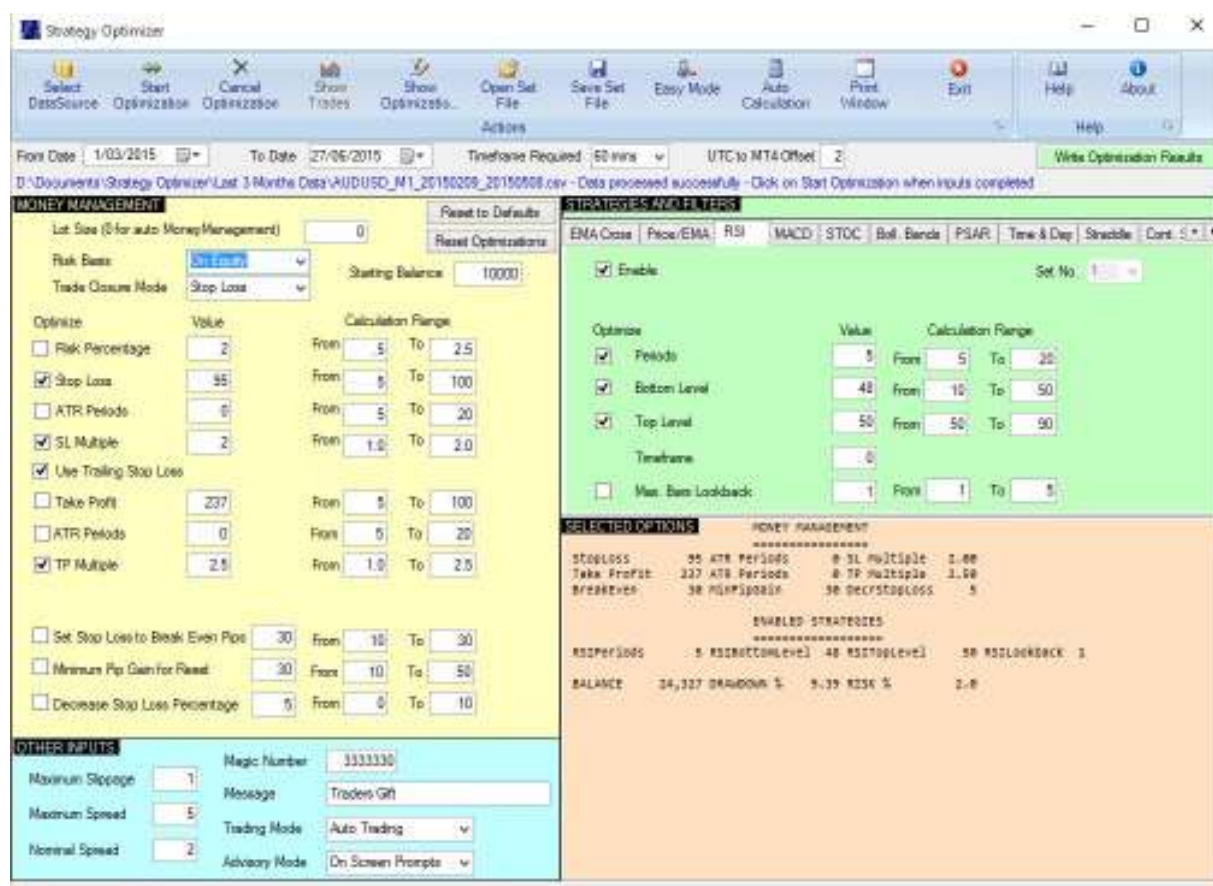
Maximum of **2 Strategies and/or Filters** (3 if you cut down on optimized values). With 2 factors, take out the lookback bars of one of the Strategies to 5. (Filters generally do not have this setting but some do have lookback as the numbers of periods from which to derive information. For example Fibs, S/R, Divergence. Always optimize that setting). Consider not optimizing standard indicator values if the optimization is time consuming. Lookback bars on 1 strategy do not need to be optimized.

Lastly and most important, if you come across a good optimization, save it and try it out with other currency pairs. Remember, when you save a .set file, all the factors which indicate optimization are also saved unless you deselect them before saving. So if a save is made without any deselection, you will have to deselect any optimization ticks on reload if you just want to return to the best optimization.

**Strategy Optimizer** is an alternative program to MT4 Strategy Tester for performing optimizations of historical data to create set files (records of inputs and optimized values) for use within the Traders Gift EA.

Whilst it is capable of reading and writing these files, the files are not usable by any other other EA's however the optimization values are indicative of the performance of the selected Strategies and Filters.

There are 2 screens, The input screen and the results screen and a common toolbar which contains all the command buttons.



**The Command buttons** are -

**Select Data** - A File dialog box will pop up allowing selection of the Data Source - use the free data supplied - 1 Min data (yyyy.MM.dd, hh:mm, Open, High, Low, Close, Volume). Before selecting Data, ensure the From and To Dates are nominated and the Timeframe required are set.

**Start Optimization** - This button starts the optimization after all required inputs are completed.

**Cancel Optimization** - To stop the optimization during the period of optimization. You may require 2 presses of this button to stop the process

**Show Trades** - After optimization is completed and the results screen is shown, this will show a list of trades associated with the selected optimization result and a candlestick graph centered on the particular trade selected together with the selected indicators. The button caption will change to "Hide Trades" to return to the results summary of the selected optimization.

**Show Inputs** - From the results screen to return to the inputs screen. The caption will then change to "Show Optimizations" to return back to the results screen.

**Open Set File** - Once a data source has been selected, this button is enabled to allow you to load a previously saved set file. If the set file was saved with Optimizations, these boxes will be ticked. To return to the final result of the loaded set file, deselect the tick boxes before running the optimization.

**Save Set File** - Save the result of the currently selected optimization together with the state of any ticked boxes.

**Easy Mode** - Shows a simplified input screen with all enabled strategies and filters shown on 1 tab.

**Auto Calculation** - Single button press to run all Reference Set optimizations without any other input on all 14 currency pairs. (Available on Auto version only)

**Print Window** - prints the content of the current window to a selected printer.

**Exit** - Ends the program

**Help** - Displays the PDF help file

**About** - Displays the current version number and date.

The screenshot shows a software interface with four main sections:

- MONEY MANAGEMENT (Yellow background):**
  - Lot Size (0 for auto MoneyManagement): 0
  - Risk Base: On Equity
  - Trade Closure Mode: Stop Loss
  - Starting Balance: 10000
  - Buttons: Reset to Defaults, Reset Optimizations
  - Optimize table:
 

Optimize	Value	Calculation Range
<input type="checkbox"/> Risk Percentage	2.0	From 5 To 2.5
<input checked="" type="checkbox"/> Stop Loss	10	From 5 To 100
<input type="checkbox"/> ATR Periods	0	From 5 To 20
<input checked="" type="checkbox"/> SL Multiple	1	From 1.0 To 2.0
<input checked="" type="checkbox"/> Use Trailing Stop Loss		
<input type="checkbox"/> Take Profit	10	From 5 To 100
<input type="checkbox"/> ATR Periods	0	From 5 To 20
<input checked="" type="checkbox"/> TP Multiple	1	From 1.0 To 2.5
<input type="checkbox"/> Set Stop Loss to Break Even Pips	30	From 10 To 30
<input type="checkbox"/> Minimum Pip-Gain for Reset	30	From 10 To 50
<input type="checkbox"/> Decrease Stop Loss Percentage	0	From 0 To 10
- STRATEGIES AND FILTERS (Green background):**
  - Buttons: EMA Cross, Price/EMA, RSI, MACD, STOC, Boll Bands, PSAR, Time & Day, Staddle, Cont. 1.1
  - Enable
  - Set No. 1
  - Optimize table:
 

Optimize	Value	Calculation Range
<input checked="" type="checkbox"/> Periods	14	From 5 To 20
<input checked="" type="checkbox"/> Bottom Level	20	From 10 To 50
<input checked="" type="checkbox"/> Top Level	70	From 50 To 90
Timeframe	0	
<input type="checkbox"/> Max. Bars Lookback	1	From 1 To 5
- OTHER INPUTS (Cyan background):**
  - Magic Number: 3333330
  - Minimum Stopage: 1
  - Maximum Spread: 5
  - Normal Spread: 2
  - Message: Traders Gift
  - Trading Mode: Auto Trading
  - Advisory Mode: On Screen Prompts
- SELECTED OPTIONS (Orange background):**
  - MONEY MANAGEMENT:
 

STOCLoss	10	ATR Periods	0	SL Multiple	1.00
Take Profit	10	ATR Periods	0	TP Multiple	1.00
breakeven	30	MinPipGain	30	DecrStopLoss	0
  - ENABLED STRATEGIES:
 

RSIPeriods	14	RSIBottomLevel	30	RSITopLevel	70	RSILookback	1
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### The Input Screen - 4 areas

**Money Management** - All numerical inputs are optimizable.

2 buttons

"Reset to defaults" - sets selections back to program start. that is SL , SL Multiple, Use Trailing SL, TP Multiple, all selected for optimization. RSI strategy selected - all values optimized except Lookback.

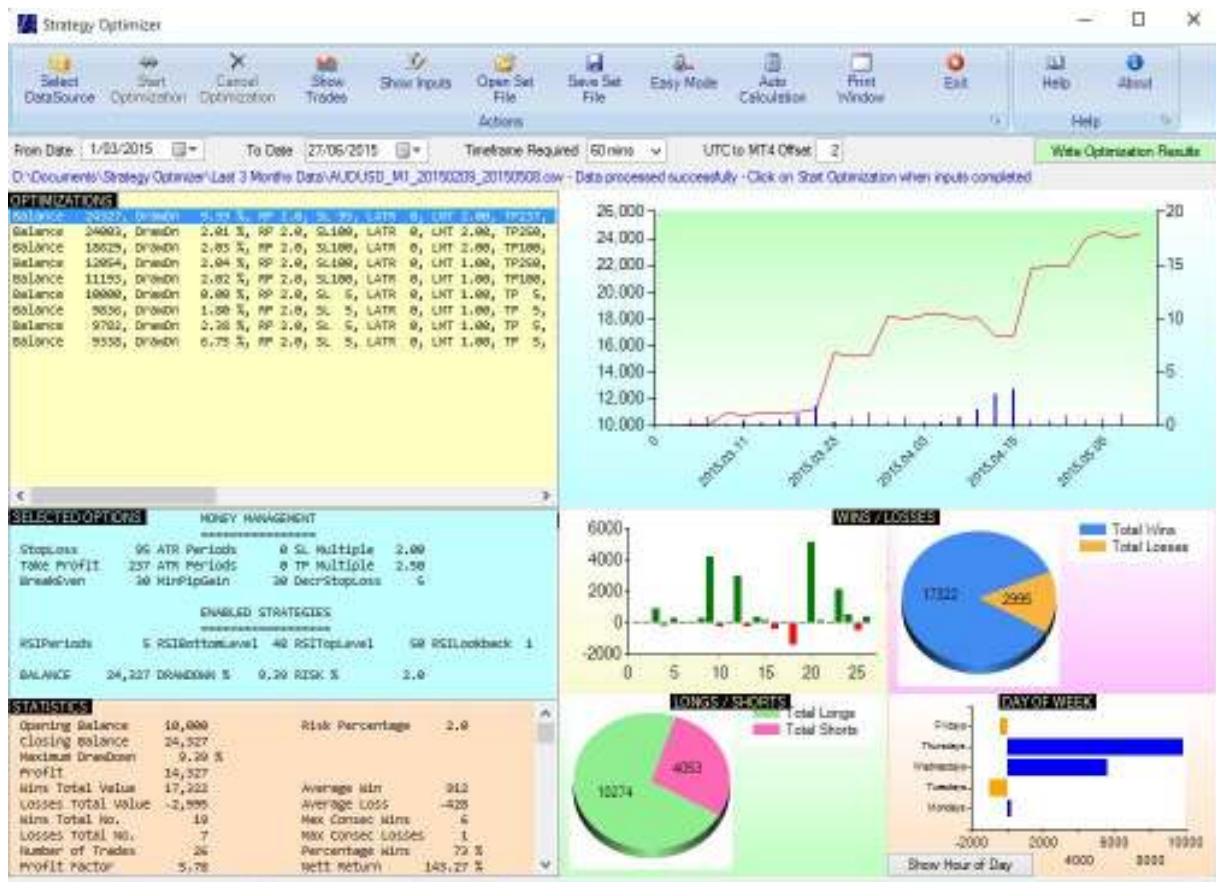
"Reset optimizations" - All boxes untricked except Use Trailing Stop Loss

**Other Inputs** - not necessary for optimization but changes will be saved in any save set file.

**Strategies and Filters** - A tabbed interface - Total of 12 strategies and 9 Filters. Use the left and right arrows on the far right to see display other input boxes. Final tab is used in the Easy mode to display a summary of the previous 21 tabs.

**Selected Options** - As any tab is enabled, a summary of selections will be shown when another tab is selected or another input box on the left is selected.

When all inputs are completed - Press the "Start Optimization" button



**The Results Screen** - shown automatically when optimizations are completed.

**Optimizations** - This is a list of completed optimizations with noteworthy results. On results which improve on the previous best result are shown. Select any line to display a graphical summary to the right and selected options and statistical information below. The Day of Week graph (bottom right) can be changed to Hour of Day. These days and times relate to when the trade was opened.

**Selected Options** - shows the input information.

**Statistics** - gives the overall information of the selected optimization. Use the "Print Window" button for a pictorial record.

**Chart Area** - Gives graphical information of the selected optimization including -

Main Chart - growth of equity with each trade and blue bars at the bottom showing size of each wager - scale on RH side.

Wins/Losses - 2 charts

Longs/Shorts - Buy trades and Sell trades

Day of Week - when trades were opened. Can be changed to Hour of Day.

**Write Optimization Results** - (Button on top right) will save a record of all optimization results within the current session (from program start until button press) in a csv format best viewed in a spreadsheet.



By clicking on the "Show Trades" button, each trade that took place within the selected optimization, will be displayed. To the right, a candlestick chart together with selected strategies will display centered on any selected trade. Button will change to "Hide Trades" to return to the original screen.

**Using a VPS (Virtual Private Server).** Refer [Post #206](#)

A Virtual Private Server is a remote computer which is accessible through the internet and provides a similar interface as if it was your own personal computer. The primary advantage is that it is always on and able to run MetaTrader (or any other Windows program) 24/7 and, 99.9% of the time, is not subject to interruptions.

It is normally hosted on a very secure server and has an uninterruptable power supply making it very reliable and able to monitor trades continuously. If the server is located closer to the Brokers server than your own computer, the advantage is that your trades will be executed in less

time.

To use a VPS with MT4, **you will need a VPS running the Windows operating system**. Once you complete the sign up formalities, you will be given a link to run the computer as if you were sitting in front of it and will be able to upload and install Windows programs, notably your Brokers version of MT4. Some VPS's have MT4 pre installed.

There are a number of free offerings notably [Amazon Web Services](#) (free for 1 year) but with limited memory (512mb). If you are choosing a commercial service, I suggest a minimum of 1024mb memory (1gb). You can comfortably run up to 4 instances of MT4 with Amazon but access will be slow during trading hours. Expect to pay around US\$30 per month for a commercial service. Metatrader does have it's own offering however I do not have any experience with it.

Once you have uploaded and installed MT4, you run the program as you would with your own PC, the advantage being that it is always on and connected to the internet even if you are not accessing it.

**What to Optimize** - Traders Gift EA provides close to 100 numerical inputs, each of which can be optimized.

The decision on which factors to optimize lies with the expectation of return for money invested and the safety of the investment. Very simply put, the Profit Factor and Drawdown.

Profit Factor is the ratio of Nett Profit versus Net Loss. That is a measure of the efficiency of the investment.

Drawdown is the maximum percentage fall from any position throughout the term of the investment. This is the risk of the investment.

The significant advantage of Strategy Optimizer is the ease of determining these factors and the graphical representation. The blue and orange graph on the centre right of the results page give the Profit Factor and the Equity graph gives the drawdown. Use your printer to take paper copies of these graphs or screen capture software such as [Greenshot](#) for comparison with other optimizations. Also remember to use the "Write Optimization Results" button on the RH side just below the toolbar for a complete record of all optimizations within the current session.

You no doubt have heard the number of total potential iterations -

1. 10 variables with 10 steps = 10,000,000,000 iterations
2. 8 variables with 8 steps = 16,800,000 iterations
3. 6 variables with 6 steps = 46,700 iterations

Use of the genetic algorithm decreases these iterations dramatically and Strategy Optimizer

recognises which variables have the greatest impact. That is what I would like you to consider in all your optimizations.

When you combine all your strategies, take notes of which indicators seem to be having the greatest effect on return.

Within a particular indicator, initially try the standard settings for the indicator leaving money management variables at the default values. Then work with the values within the indicator to see what is having the greatest impact with optimization. When you have a good idea of the most effective settings, leave them as a constant and work with the money management variables using the default optimizations of SL, SL Multiple, TP Multiple. If you are on a good path at this stage, introduce the other money management variable into the picture - Break Even, Min Pip Gain and Decrease SL Percentage.

The point I am trying to emphasize with your explorations is that initially you need to get a feel for what appears to be working for you and what can be dismissed before you enter into a fully blown optimization where you optimize all the variables. It goes without saying if you are looking for a Moving Average crossover with a fixed Take Profit and Stop Loss, you are wasting your time because you are using a lagging indicator by itself.

On the other hand if you are trying to optimize the combination of 3 indicators, it just will not work unless you expand the number of lookback bars on all combinations because all combinations work on the "and" condition not the "or" condition and you simple will not have many, if not any, trades.

The timeframe selected is a personal preference. If you are looking for a scalping type trade, then the 1 minute time frame is most appropriate. Just remember that each trade involves commission and if you are only looking for 10 pips, each trade is going to cost around 20% of your investment. If you are looking for 100 pips, the cost is around 2% of your investment.

After many optimizations over the last 20 years, I have formed the following opinions.

1. **Money management is the most important factor**
2. What is obvious in the market is not necessarily reflected in future market movement
3. Fundamental factors always overrule technical factors
4. Longer timeframes are more profitable
5. The trend is definately your friend
6. If you are unsure, dont trade or use a straddle trade

I have not really emphasised the straddle trade, but **be prepared to try indicator and price straddles**. Straddles can be very effective approaching significant Support and Resistance levels where you are not really sure of the outcome. On thing that seems to be apparent, is that once a level is cleared wither way, significant price movement can be expected. It is a good idea to have

the Fib levels plotted on the chart of the timeframe you are using. I'd suggest a lookback of a minimum of 40 periods but go beyond that to find significant highs and lows..

My own recommendations on what to optimize - 60 min. timeframe

1. RSI, MACD, CCI, Straddle, ADX, Divergence, Candlesticks in combinations of 2,
2. All variables optimized on Strategies - Filter lookbacks to be optimized
3. Lookback bars of any one of 2 strategies being optimized to 5. Other fixed at 1.
4. SL, SL Multiple, TP Multiple all optimized.
5. Optional - Break Even, Min. Pip Gain and Decr. Stop Loss to be optimized.

Optimizations are only an indication of what was effective in the past. Look at the MACD Cdl strategy at the top of the page. On Apr. 29th, [Post #1206](#), I stated that I believed that this strategy had run its course (started on 1st Feb) and we are now seeing it back at that level.

Traders Gift EA and Strategy Optimizer are only tools. It is how you work with them that determines your profitability.

### **How to Combine strategies and Filters**

There are actually 13 Strategies and 8 Filters

The primary difference is that a Strategy is normally based on an indicator whereas a Filter is based on an occurrence.

The 13 Strategies are

1. EMA Cross
2. Price EMA Cross or Position
3. RSI
4. MACD
5. Stochastic
6. Bollinger Bands
7. PSAR
8. Straddle
9. Continuous Straddle
10. CCI

11. ADX

12. ATR

13. Zig Zag

The 8 Filters are

1. Time and Day
2. News
3. Pivots
4. Fibonacci
5. Support / Resistance
6. **Divergence**
7. **Candlesticks**
8. **Volume**

The Strategies make a type of indication/prediction on the future movement of price whereas the filters act as their name implies to negate or allow trades to pass or fail. The first 5 of the 8 filters act as barriers to the trade. That is if the price or time is within the set boundaries of the filter, no trade will take place as in too close to a News release time or too close to a Support or Resistance level.

Of the 13 Strategies, some are not really appreciated that well. Notably Straddle and Continuous Straddle. A Straddle trade is 2 pending trades (Stop Buy and Stop Sell) placed at a particular Price, Time or Indicator position / cross. A Continuous Straddle has the same 2 pending trades placed but as the name implies, it is placed immediately there are no existing trades so there is continuous trade action. In reality you are going with the trend established once the buffer is breached. Always optimize the buffer with any type of Straddle and I recommend all 6 Money Management variables mentioned below also be optimized.

The first 5 filters provide no guidance on direction of a potential trade and therefore do not form the fundamental basis of any trading strategy.

The **last 3 filters** act differently in that they can provide additional confirmation of a potential trade and **can be used in combination with each other** to form a trading strategy. Probably the most reliable filter is Divergence and I urge you to do your own research if you do not fully understand the term. Volume increasing in the direction of currency movement serves as a momentum indicator. Candlestick patterns are more reliable on higher timeframes.

Because of the complexity of optimization, I recommend that only 2 (possibly 3 with concessions) strategies and filters be mixed together in an overall strategy.

Here is the point - **You are better off optimizing all the variables on 2 Strategies or Filters**

**than accepting the default values on more combinations.** If you were to combine 3 Strategies each with 3 variables and a minimum of 3 Money Management variables you have 12 variables to be optimized.

You can reduce the variables and make some indicator values fixed but as a general rule make the maximum 10 variables. That is the guide line. Of course if you are willing to let your computer run overnight on a single optimization you can go beyond that 10 figure but my experience is that if you are trying to line up the simultaneous occurrence of 3 indicators (within 5 bars) your trading frequency will be drastically reduced.

Some of the filters have a minimum number of variables and for example you could easily combine the last 3 together with the 6 Money management variables SL, SL Multiple, TP Multiple, Break Even, Min Pip Gain and Decrease SL Percentage. I have left out SL ATR and TP ATR because they are not as effective.

I would prefer you to use as many Money Management variables as possible within the overall 10 variable limit.

In summary, experiment. It is particularly easy in Strategy Optimizer, and using only the last 3 months makes optimization a far less time consuming exercise. Yesterday I provided my own recommendations on which Strategies and Filters I felt were the most worthy of attention.

### **How to Handle Money Management:**

The tools at your disposal give you many options to consider. The more of the following tools that you use and optimize, the greater the increase in Profit Factor.

1. Trailing Stop Loss - always recommended
2. Stop Loss - Must have
3. Stop Loss Multiplier - recommended
4. Stop Loss based on Average True Range (not recommended)
5. Take Profit - recommended
6. Take Profit Multiplier - recommended
7. Take Profit based on Average True Range (not recommended)
8. Set Stop Loss to Break Even - recommended
9. Minimum Pip Gain - recommended
10. Decrease Stop Loss Percentage - recommended

As a minimum - Stop Loss, Stop Loss Multiple and Take Profit Multiple should be optimized

and the last 3 also if possible. The hardest part of Forex trading is dealing with the emotional factors and that is where the EA excels. Your 2 enemies are greed and fear. Whilst an EA can handle Money Management on a per chart basis, **you need to take stock of the big picture.**

As a current example, the chart at the top of the page reflects the 7 major currencies trading the same strategy with different variables on each chart. If you look at the 2 current trades, the lot sizes are different according as to where the betting progression is situated on those pairs. The EA has an inbuilt safety barrier of a maximum of 20% of equity lot size after which the lot size reverts to the original percentage of equity. Two days ago, one of the wagers was up around the maximum and one large trade recouped a big slice of the current drawdown. That is the Stop Loss Multiple in action. It can work against you also and hence the large drawdown.

The point is that, in a live trading account, you should never allow such a significant drawdown on your equity (recommend a maximum of 30% overall) and I have enclosed the CloseTrades EA which allows you to automatically monitor your total equity on an account and shut down all EA's at a particular nominated level. In the past, I have lobbied the idea of taking a percentage of profit at different levels in the profit cycle but have settled on a method of progressively decreasing the stop loss as the trade progresses.

The concept of small Take Profits with large Stop Losses is not a proven effective money management principal. The Take Profit Multiplier can be used to set the Take Profit as a multiple of Stop Loss but I would not recommend a value of less than 1. At any rate this figure should be optimized and the default settings are from 1 to 2.5 but you can change those boundaries if required.

In summary, this is the area you should really be paying most attention in your trading endeavours. The more trades you make the greater the trading costs and you will find that once your trading costs are up around 20% of your profit, you should be examining your trading style. Just keep in mind the conventional returns on investment rarely consistently return more than 10% annually on a consistent basis, so **even if you are only making 1% per month on a compounding basis you are far ahead of most investors.** Don't think for 1 moment that you can average anything like 20% per month. It's the total picture that counts and looking at the big picture on your trading is far more important than those 100% gains.

## Finally - A Battle Plan!

This brings to an end the series of discussions started in Post 1301 and it would have been great to jump to this point to simply put everything together.

Most importantly, Traders Gift EA is a toolbox to test and back test trading ideas. Strategy Optimizer makes optimizations simple and gives you the ability to refine the inputs to successfully use Auto Trading. Don't forget that you can use Traders Gift EA in the advisory or discretionary mode. This takes the hard work out of scanning the market looking for trading ideas because the alerts happen in real time.

Whilst trading opportunities appear, it is not always certain which way the market will move and always remember that momentum will drive the market even if the direction does not seem logical. It is very timely that this discussion ends today because there is looming, the greatest shake up that the currency market will ever experience with the potential bankruptcy of Greece.

**Plan to make use of Straddle Trades more often, be aware of all Support and Resistance levels and always look at the big picture.** That is the Daily charts. Unless you are scalping the market, avoid trading on shorter timeframes (less than 1 hour). To use Traders Gift effectively, **you need to set up a VPS** and run up to 4 instances of MT4 on each VPS. On a monthly basis, redo your optimizations on the last 3 months data and run them on a demo account for at least 2 weeks and then pick the eyes out of the successful sets in combination with the successful currencies. Keep your investments on each set at a minimum. Even use 1% of equity and watch for non performers in live trading and don't persist with them. If you can make 5% consistently each month you are on your way to becoming a successful trader.

**Be very aware of News Releases** even with a view of not trading at all around major releases because the market can whipsaw violently taking out Stop Losses. There will be trading opportunities everywhere in the next couple of weeks but do not be in a hurry when the market starts moving. Beware of false signals! **The Banks prey on impulsive traders** and what seems blatantly obvious can be easy pickings for the bigger traders. Get to understand fully the Commitment of Traders releases and make sure you are always fully aware on pending news releases.

Obviously my biggest and final idea is to **manage your money. That means keeping good records of your trades**, what worked and what didn't along with relevant comments. There are millions of trading ideas and always keep an open mind. Forex Factory is a respected source of free information and remember to read the commercial threads as many offerings are still free.

I have no connection with this site whatsoever but I do highly recommend it for free trading systems. What I would suggest is that you review the systems and create a database of the ideas which appeal to you and see if you can incorporate them into Traders Gift. Particularly read the section on "How I saved a million in 1 year".

<http://forex-strategies-revealed.com/>

I have waived the copyright on Traders Gift EA and the source code is yours to modify however you like.

