Exact Trading Automated Turtles
London Break Out
Session_BO Expert Advisor

Date: December 2017

Author: Paul Langham

1 Introduction

On the 25th November 2017 in the East India Club, St James's, London W1, during an 'Automated FX trading seminar, the Exact Trading Automated Turtles were born.

The founding members of the Exact Trading Turtles present at the seminar are listed below in alphabetical order:

Ben Levy

Damian Barrett

Daniel Smith

Emil Filip

Knut Arne Vie

Marc Mes

Markus Lenzing

Olivier Bailliot

Paul Langham

Paul McGough

Paul Murfin

Philip McCool

Sam Bhugaloo

S P Farry

S P Farry Junior

Troy Ryan

1.1 Objectives

The objective of the Exact Trading Automated Turtles group is to prove to the FX world that regular FX traders, most of whom have professional careers outside of the markets can make reasonable profits in the FX markets via simple automated trading strategies, one of which will be presented later in this document.

A secondary objective will be to approach the market place with a view to raising capital which will be traded.

The Exact Trading Automated Turtles adventure starts for real, in live markets on the 2nd January 2018 when a London breakout EA running under MT4 will be launched.

Details of the EA are included in this document.

Paul Langham

December 2017

Version Control		
Name	**Date**	**Reason**
Paul Langham	30th December 2017	Add broker time zone chart
Paul Langham	30th December 2017	Switch +/- on Broker GMT
Paul Langham	13th May 2018	Detail GMT and Summer time
Paul Langham	17th June 2018	Further detail stop process

2 Background

2.1 Simplicity

During the many years that I have been helping traders, I have always taught that trading is best approached with a 'keep it simple' approach. Trading ideas born out of screens cluttered with a myriad of indicators, can and will lead to conflicting rule sets, which may remain camouflaged d in the short term, but under closer scrutiny and live trading conditions become statistically very unreliable.

The issue being, the more you add the muddier the water becomes.

2.2 Hedge Funds and CTA Managers

Unknown to most traders, especially retail, top CTA and Hedge Funds use simple ideas to trade markets and as a basis for development of their trading systems.

Traders imagine that because these people are generally very well qualified and highly articulate their strategies must be very complex. The surprise is, that most of these people have understood - probably due to their undisputed intelligence and academic prowess - that prediction, be it in the stock market, in FX or in any other financial market is the first step on the road to the poor house.

Because of their understanding the tend to trade mostly ‘with the trend’.

2.3 FX Trading Approach

Foreign Exchange trading like any other financial market is about being right or wrong. There is no middle ground. It is binary, black or white. Either you win, or you lose. This is part of the markets fascination and attraction for most people, the simplicity of the 50/50 outcome coupled with the complexity of finding an approach which works and then applying that approach in the simplest possible manner.

Of course, there are trading costs to consider and our ever-present friend the broker is never very far away, which means that even when the trader wins, he wins a little less than he should do, due to broker fees, slippage and other stoppages. And when the trader loses he loses a little more than he should.

One of the principal ideas of the Exact Trading Automated Turtles group is to allow FX traders the possibility to access all aspects of the FX markets, meaning any currency pairs, not just the EURO/USD and across all time zones. Not just London. This can be achieved via the use of automated trading scripts which are able to run unattended and trade whilst you sleep.

Due to the low entry price barrier of algorithmic development, maintenance and execution, Metatrader EA’s are the chosen vehicle for this venture, just about every serious trader can enter and play the game at this level. Costs are very low now and should not represent a barrier.

Once strategies have been proven in a live market for a reasonable period, they can be applied to more robust platforms and the futures markets, on the CME.

3 Technology

We are currently within the midst of a veritable industrial revolution in terms of technology.

As a knowing trader, you must surely realize by now, - but previously would never have imagined - that you would be able to compete on the same playing field and at the same level as the like sof Goldman Sachs or Barclays. The reality is that you can and it’s all down to technology.

MT4 EA’s can be easily attached to a traders MT4 trading platform. It’s child’s play.

However, as a trader you will appreciate, this isn’t enough, you need to guarantee that your EA’s will always be running during market trading hours and therefore use VPS machines which run 24/7, without undue technical difficulties.

Additionally, when trading EA’s you must have lightning fast execution.

Whatever your trading method or timeframe, it is essential that you always go for broke and attempt to squeeze that final piece of profit out of the market and this means always trying to get your trade at the front of the queue during execution, even if you are just trading once per day.

When a trade has to be executed and fired into the market place, why give something to your competitor traders, or your broker, we must make sure the trade is executed quickly into the market place, when it is time to trade.

3.1 VPS

Given the above technology requirements a VPS (Virtual Private Server) is recommended.

CNS (Commercial Network Solutions) are serious VPS providers who use Peer to Peer technology which bypasses normal internet traffic.

Using CNS, it is possible to verify the transmission times from CNS to your broker. Sub or <1 millisecond times are preferred. This will give you an edge above more mediocre trader.

MT4 consumes very little CPU, some EA's however depending on what they are doing, can consume a lot of CPU so understanding how your EA works is essential

The EA example that I will present later in this document does not consume much CPU, so a standard entry level VPS machine can be used for running it. Of course, the machine should be otherwise as lightly loaded as possible with nothing or very little else on the machine.

3.2 Exact Trading Discount with CNS VPS machines

CNS have been kind enough to offer us a full 10% discount on their machines, which depending on what machine your order which can add up to quite a lot of money.

In order to obtain this discount, use the direct link below

CNS VPS

Or use the voucher 'EXACTTRADING' on final check out to qualify for the discount

Exact Trading Voucher

4 London Breakout

If you have been trading for any length of time, you will know that the Foreign Exchange markets is a 24-hour market which sleeps only at weekends, trading 24/5 with control of the market being passed from one major trading center to another namely, Sydney, Tokyo, London, New York.

You will almost certainly have heard of the largest FX market place in the world, which is London, and the 'London session' which is famous for its huge daily volume and market volatility.

Where volatility goes, traders generally follow, especially those who are looking to trade momentum type strategies. Generations of them have tried their luck at capturing the frequent and large moves which occur almost on a daily basis during the London session.

Some traders attempt to position themselves with the trend, looking to capture as much of the move as they possibly can. Some traders like to fade the move. There are scores possibly hundreds of different trading ideas and methods which can result from this one morning trading session

Whilst it is true that a good move happens on most days, what I have observed over the years, is that most traders do not know when they should stand aside due to poor market conditions.

Many traders seem to believe that money can be made every day or at least a trade setup should occur every day, which is not necessarily the case. Understanding when to stay out of the market, is just as important as knowing when to stay in.

5 SESSION_BO

The EA that we will use to trade the London breakout is called "Session_BO" or "Session breakout", it is flexible enough to run against any currency pair or asset class which runs under MT4 and it can be set up to run at any time or day of the week.

Even though it has the flexibility to run against any currency pair, we need pairs which move. And which are volatile during our time zone.

As we are looking to capture the volatility which appears during the London sessions, the EURUSD is our instrument of choice, this has several advantages over other pairs.

- EUR/USD is the most widely transacted currency pair on the planet
- One of the largest market places in the world
- Deep liquidity
- Possible to obtain excellent spreads from as low as 0.4 pips or even less.
- Great two-sided market, so reduced slippage. This is a big advantage to us, over other less liquid currency pairs. Count up, based on how many trades you take, how many pips and how much money per year you will save by keeping your trading costs to a minimum. It adds up believe me

5.1 How does it work ?

Session_BO is a breakout EA much like many others on the market, with an important difference being that it waits some time before entering the market, rather than rushing in on the first break after 8 AM.

One of the first errors most traders make is to grab at the first break out above a very narrow range.

In addition, the Session_BO does not jump blindly into the market, at the first sign of a breakout, it waits sometime until the breakout has been proven before entering the market.

Session BO intelligently collects data and requires more evidence that a trend might be about to get going, before putting itself into the market.

Session_BO allows other traders to make the mistakes of testing the water and only enters when the chances of a trend follow through are very high.

5.1.1 Information Gathering Window

Before arriving at a potential trigger point, the Session_BO EA must create the setup conditions for the break.

Session_BO measures the high and low prices during a period of "information gathering".

For the version of the EA being described here and which we will trade, the "information gathering period or window will be represented by measuring just one hour of trading activity.

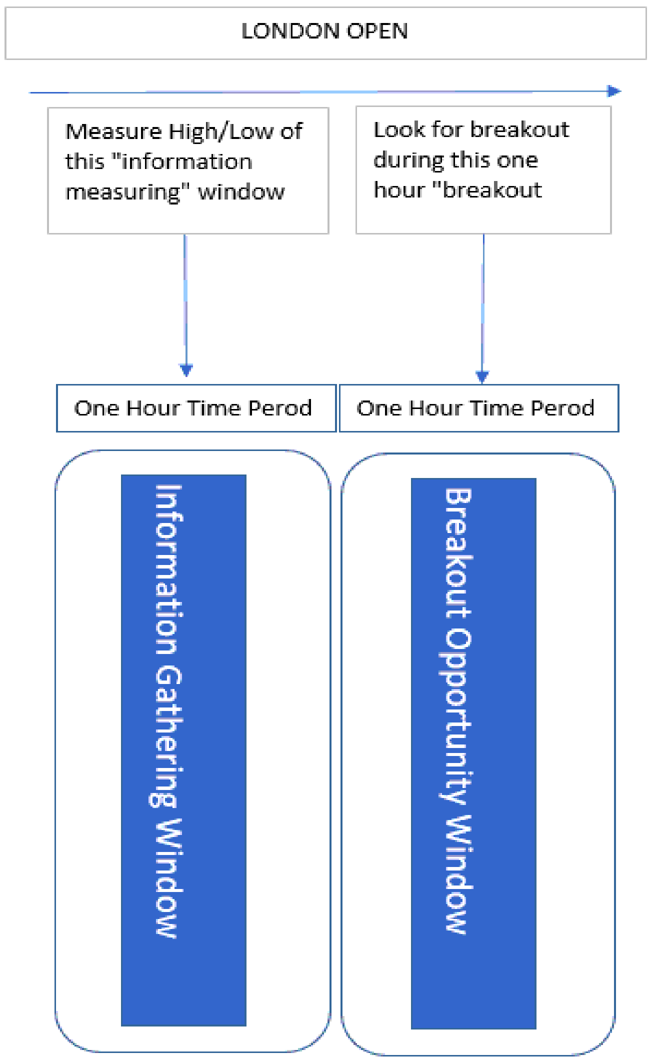
During the one-hour window, we will gather "information" about price, and record both the high and low achieved during that period.

5.1.2 Breakout Opportunity Window

Once the “information gathering” window has been completed and price breaks out either above the high or below the low of the “information gathering” window, we will then enter into the “get ready” phase, which can be considered as a “trade trigger”.

However, and this is a very important point, we will only accept a break above the high or below the range to be a valid trigger, if such a break happens within the first hour following the end of the “information measuring” window. I repeat the breakout must happen within the first hours trading after the close of the measuring window. If there is no breakout during this period then there is no trade for the day.

The “breakout opportunity” window is a one-hour time frame which immediately follows the “information measuring” window.

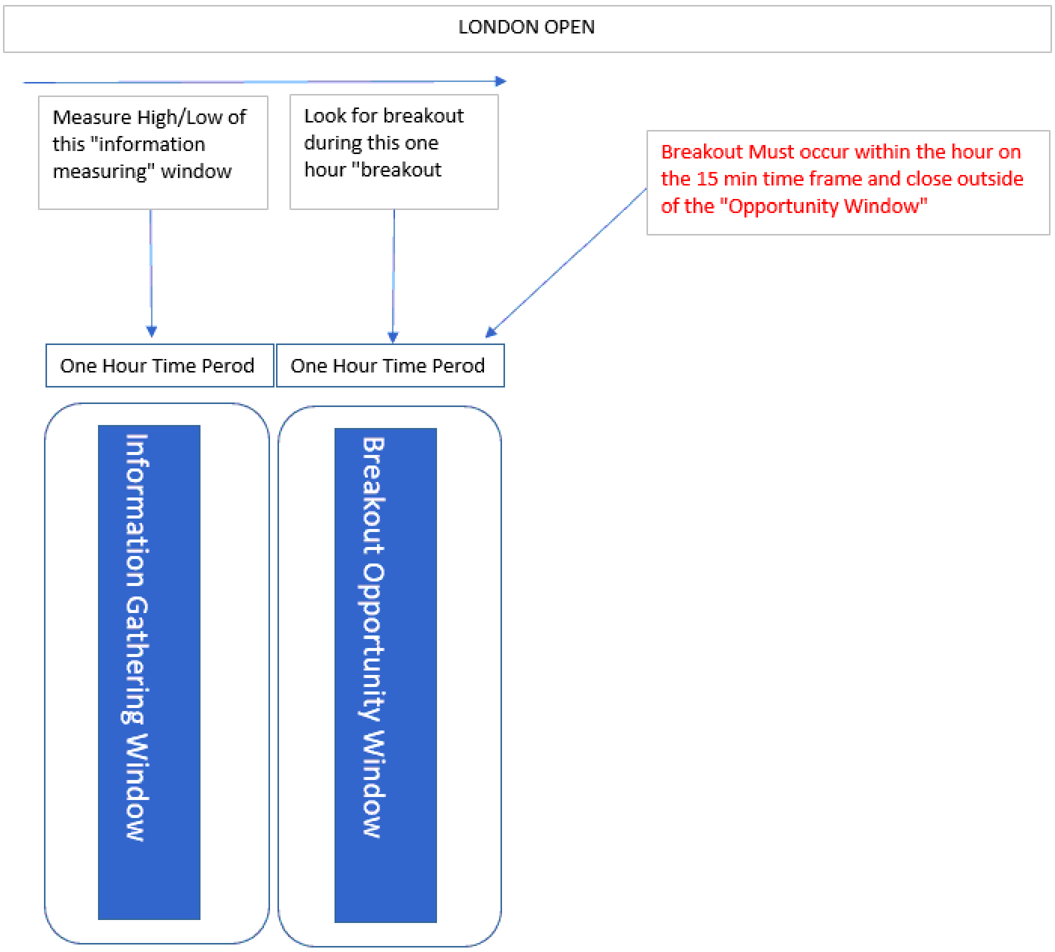


5.1.3 Price Confirmation – 15minute time frame

Not only must the breakout happen within the first hour following the “information gathering window”, but price must close above or below the range created by that “information gathering window” and do so using the 15-minute timeframe.

That is to say, price must close outside of the range and stay there for a period of fifteen minutes, in the hour following the information gathering window. If the close on the fifteen-minute time frame is outside of the range, then the condition is satisfied.

If such a break happens and is confirmed on the 15-minute timeframe, Session_BO will enter at the open of the next bar and in doing so will be opening a trade in the direction of the trend.



5.1.3 Price Confirmation – One-hour timeframe

The good news thee is a second version of this EA with exactly the same parameters which just a one-hour confirmation window, so the breakout must confirm on the one-hour time frame for the signal to be generated.

The even better news is that this EA is even more profitable than the 15-minute version.

5.2 Stops and Trading Close Out

Session_BO closes the breakout trade at the end of the business day at 22:45 CET, but only in the case of winning trades and in doing so gives time for winning trades to develop before closing out profits.

Stops are strictly controlled, any trades subject to false breakouts will be ‘trigger stopped’ on the on the opposite side of the session high/low or “information gathering window”, but only properly stopped out if the price confirms outside of the window based on one observation of the timeframe being traded.

That is to say, when trading LONG, a breakout below the measuring window, will only be stopped out at the beginning of the next bar following a close beneath the measuring window on the fifteen-minute timeframe if trading the fifteen-minute timeframe and on the one hour if trading the one-hour time frame.

The EA has been specifically designed to use this 'confirmation' method on both purchase and stop out to avoid unnecessary losses.

6 Profits, Drawdown, Leverage and Risk

6.1 Drawdown

When running an EA one of the most important things to be considered is the draw down. Each trader will have his/her own preference for what they consider as an acceptable drawdown amount.

What traders frequently do not understand about drawdowns is the fact that your drawdown will be affected by the amount of leverage on the account and the actual dollars at risk per trade.

Traders are more likely to accept a higher percentage drawdown if this represents a small dollar amount, than a low drawdown percentage which represents a high dollar amount.

I personally always prefer to underplay my trading, erring on the conservative side, so that I can ensure I will always be able to come back to the table tomorrow should a big SNB type shock hit the market which results in a large move and potential losses.

6.2 Leverage

Most professional trades play with much lower leverage than retail traders would imagine they do. This is because as traders, they understand risk and the stress and impact over leveraged positions can have on the trader.

In addition, over stressed traders can and frequently make irrational decisions, even to the extent that they decide to override automated trading systems. Trust me I have seen it done.

Most of the tests that I present are based on a one lot stake so $100.000 with a $10.000 account meaning leverage of 10 to 1.

At this level you can get an idea of what an EA can do when the throttle is opened.

Personally, I like to scale right back to one tenth of this size and will trade 0.01 lots with a $10.000 account but trade a mixture of EA's together.

7 Psychology and Trading the Session_BO

Most people who have been trading for any length of time understand the psychological impact and stress that a trader undergoes when leaving trades on overnight. Therefore, a session breakout trading system is a great system for people who are getting going with automated trading systems and are looking to build confidence.

Here's for why :

- One trade a day
- Win/Lose/No trade
- All positions netted out at the end of the day, so the trader goes home flat
- No overnight risk

Risk managers in banks, strongly approve of systems which close at the end of the day’s trading, so should you. It means that you go home “flat” with a bank balance which is either the same (in the case of no trade), increased (winner), or lower(loser) than it was in the morning.

Going home flat at the end of the day, ready to come back the next day, able to face the markets with a clean sheet is a great way to trade. It plays out very well with the human psyche as well, it suits very much the “day trade” nature of what a lot of traders are looking for.

A lot of traders like being ‘involved’ or having a lot of market ‘action’ and want at least one trade per day. In the normal case of events this causes over trading and grabbing at the wrong types of trades, with automated trading, you generally get a trade when the market dictates a trade is available and your trading is much more controlled.

<u>That is why I strongly recommend trading this type of system, especially when you are getting going with automated trading.</u>

9 EA Installation

Installing the EA and setting it up follows the normal MT4 process. Here is a quick recap for you.

9.1 EA installation

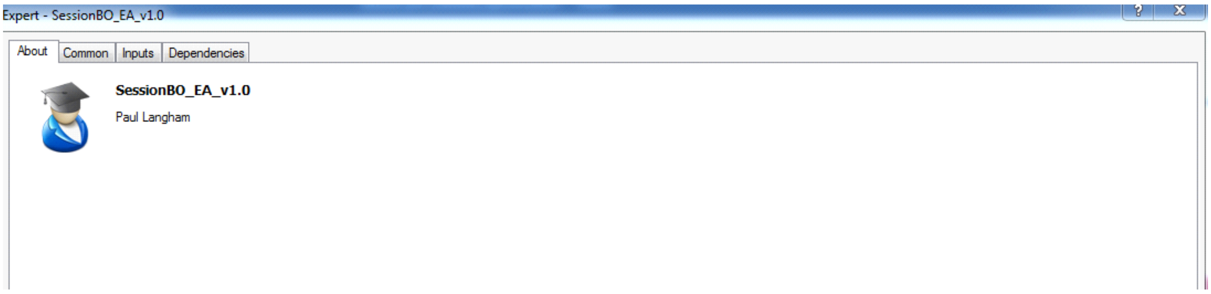
Drop the EA “SessionBO_EA_v1.0.ex4” into the following folder in your Mt4

MQL4 > Experts

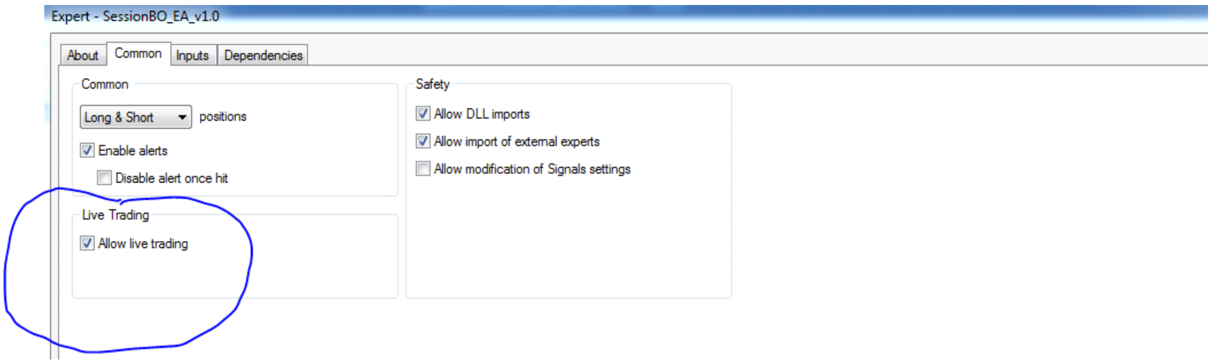
9.2 Parameter Global Snap Shot

Here is an overall snap shot of the parameter setup and global settings:

About – no change



Common – if you are trading live please check the live trading box



Input Begin Time and End Time.

This screen shot is taken from the EA running on IC Markets which runs on GMT +2 in the winter and GMT+3 in the summer.

As ICM move their server time when the clocks move in the US then we need to be careful that if the UK does not move at the same time, we do not get out by an hour.

We are interested in the UK Summer and winter time dates as the EA is based on the London open, not the New York. But at the same understand our broker server time to align correctly.

<u>We need to be very very careful to get the right time here depending on the time zone and location of your server. Adding a different window will completely change the EA results.</u>

<u>This is why I have created section 9.3 to ensure everyone understands what they need to do and are perfectly aligned with the rules of the EA</u>

<u>Please read the section attentively.</u>

Variable	Value
~~EA BASIC~~~~~~~~~~	~~~~~~~~~~EA BASIC~~~~~~~~~~
Allow trades	Buy and Sell
TakeProfit (p)	0
Begin time	10:00
End time	11:00
Box color	Goldenrod
Entry after (hrs)	1
Daily Close	23:45
Lot calculation mode	Lot fixed
Lot value/percentage	0.1
Magic number	987
Auto rescale for 5-digit	true
Attempts of open/close/modify	10
~~INFO/MESS PANEL~~~~~	~~~~~INFO/MESS PANEL~~~~~
Info show	true
Info X coord	10
Info Y coord	15
Info corner	Left upper chart corner
Messages show	false
Messages X coord	240
Messages Y coord	15
Messages corner	Left upper chart corner
Messages quantity	15
Play sound on message	true
Send e-mail on message	false
Push-notification on message	false
Text color	LightGray
Text font	Courer New
Text size	10
Back color	LightSlateGray
Transparent	true

9.3 UK GMT

As the basic concept of this EA is to exploit the London open we need to always ensure that the measuring window is aligned with London.

The London opens at 8 AM London time

The window must measure between 8 AM and 9 AM London time.

The finish time will be 21:45 London time.

During the summer London tie is GMT+1 in the winter London will be GMT precisely.

Depending on your broker and their GMT time please set up your window so that it is equal to 8 AM – 9AM London time with a finish time

My broker IC Markets have their sever in New York are GMT+2 or GMT+3

This means that at the start of Summer Time, they will switch their server time from GMT +2 to GMT +3 In winter when DST (daylight saving time) begins they will switch back from GMT+3 to GMT+2

10 Results

Prior to running your EA in live mode, you should make sure that in demo the results you obtain are identical to my results.

Obviously, your results will depend on the period for which you run the EA and the set-up parameters.

I strongly advise you to set up the EA with the same parameters as I used during my testing and to run your own tests, to make sure you obtain the same results as I do.

Only then should you go live and do so with a small account.

Trading is about building things very slowly and about having the patience to do so. Those people who take the necessary time to build and construct things in a simple, yet structured manner will always come out winners.

10.1 Parameters

Here are the parameters that I will use to run my EA and that you should modify

- Start Time Window 8:00 AM UK
- End Time Window 9:00 AM UK
- Daily Close 21:45 UK
- Lot Value 0.2

Notice that I am using a 10k account with leverage of 10, as I am trading one full lot which is the equivalent of $100.000

The leverage used is up to each individual trader although I personally would not recommend going any higher than this level.

The downside must be considered as well. Too much upside in terms of piling on the leverage can and frequently does end in misery. Better to run multiple systems, each of the them quietly nipping away at the market taking 3, 5 or 10 percentage, than trying to force things by asking for 40% with just one EA.

10.2 Benchmark results one-hour version

Here are the results I obtained using DUKASCOPY Tick Data with 0.4 to 3 pips spread and positive slippage of 1.1 and negative slippage of 1.7 pips

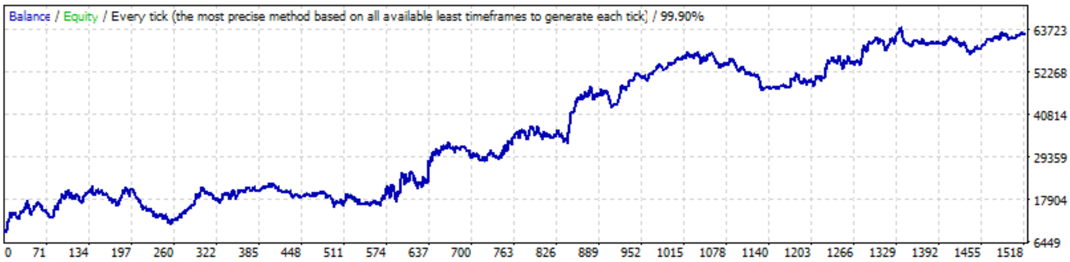
This the flagship version of this EA simply and makes 520% over the period 2003-2017. Waiting for confirmation on the one hour the curve becomes very attractive, but of course the 50% drawdown is of unacceptable but if we throttle it back the result is still good for an individual EA as part of a portfolio. Tested with 1 lot, suggested size 0.2 lots.

Strategy Tester Report

SessionBO_EA_v1.0

FXCM-EURDemo01 (Build 1090)

Symbol		EURUSD (Euro vs US Dollar)			
Period		1 Hour (H1) 2003.05.09 09:00 - 2017.12.20 21:00 (1970.01.01 - 2018.01.01)			
Model		Every tick (the most precise method based on all available least timeframes)			
Parameters		Section10="~~~~~~~~~~EA BASIC~~~~~~~~~~"; uiTP=0; sTimeBgn="09:00"; sTimeEnd="10:00"; clBody=Goldenrod; uiEntryWindow=1; sDailyClose="22:45"; dLotValue=1; iMagicNumber=987; bRescale5Digit=true; uiAttempts=10; Section20="~~~~~INFO/MESS PANEL~~~~~"; bInfo=true; uiInfoXCoord=10; uiInfoYCoord=15; bMess=false; uiMessXCoord=240; uiMessYCoord=15; uiMessQuant=15; bMessSound=true; bMessMail=false; bMessPush=false; clrVisTextColor=LightGray; sVisFontName="Courer New"; iVisFontSize=10; clrVisBackColor=LightSlateGray; bVisTransparent=true;			
Bars in test	91157	Ticks modelled	286697439	Modelling quality	99.90%
Mismatched charts errors	0				
Initial deposit	10000.00			Spread	Variable
Total net profit	52394.00	Gross profit	381890.00	Gross loss	-329496.00
Profit factor	1.16	Expected payoff	34.56		
Absolute drawdown	1084.00	Maximal drawdown	11059.00 (50.65%)	Relative drawdown	50.65% (11059.00)
Total trades	1516	Short positions (won %)	875 (54.40%)	Long positions (won %)	641 (51.33%)
		Profit trades (% of total)	805 (53.10%)	Loss trades (% of total)	711 (46.90%)
	Largest	profit trade	4367.00	loss trade	-2053.00
	Average	profit trade	474.40	loss trade	-463.43
	Maximum	consecutive wins (profit in money)	10 (5447.00)	consecutive losses (loss in money)	9 (-3776.00)
	Maximal	consecutive profit (count of wins)	8439.00 (6)	consecutive loss (count of losses)	-4827.00 (5)
	Average	consecutive wins	2	consecutive losses	2



10.3 Benchmark results 15-minute version

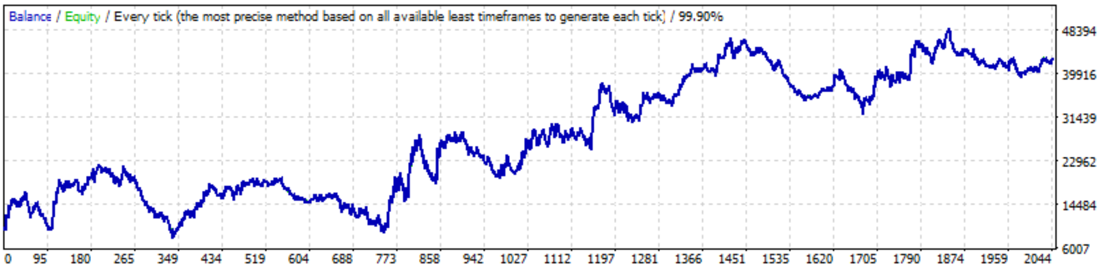
Here are the results I obtained using DUKASCOPY Tick Data with 0.4 to 3 pips spread and positive slippage of 1.1 and negative slippage of 1.7 pips

- EURO/USD

This run shows 320% over the period but the drawdown is 31%. One lot was traded. Ideally the EA should be throttled back to 0.2 lots and this will work well for any mixed portfolio

Strategy Tester Report
SessionBO_EA_v1.0
ICMarkets-Demo02 (Build 1090)

Symbol	EURUSD (Euro vs US Dollar)				
Period	15 Minutes (M15) 2003.05.06 07:00 - 2017.07.28 21:45 (1999.01.01 - 2017.07.29)				
Model	Every tick (the most precise method based on all available least timeframes)				
Parameters	Section10="~~~~~~~~~EA BASIC~~~~~~~~~~"; uiTP=0; sTimeBgn="10:00"; sTimeEnd="11:00"; clBody=Goldenrod; uiEntryWindow=1; sDailyClose="23:45"; dLotValue=1; iMagicNumber=987; bRescale5Digit=true; uiAttempts=10; Section20="~~~~~INFO/MESS PANEL~~~~~"; bInfo=true; uiInfoXCoord=10; uiInfoYCoord=15; bMess=false; uiMessXCoord=240; uiMessYCoord=15; uiMessQuant=15; bMessSound=true; bMessMail=false; bMessPush=false; clrVisTextColor=LightGray; sVisFontName="Courer New"; iVisFontSize=10; clrVisBackColor=LightSlateGray; bVisTransparent=true;				
Bars in test	355924	Ticks modelled	278946470	Modelling quality	99.90%
Mismatched charts errors	0				
Initial deposit	10000.00			Spread	Variable
Total net profit	33021.07	Gross profit	461316.41	Gross loss	-428295.34
Profit factor	1.08	Expected payoff	16.18		
Absolute drawdown	1984.47	Maximal drawdown	15075.08 (31.96%)	Relative drawdown	64.51% (14566.78)
Total trades	2041	Short positions (won %)	1126 (46.00%)	Long positions (won %)	915 (43.06%)
		Profit trades (% of total)	912 (44.68%)	Loss trades (% of total)	1129 (55.32%)
	Largest	profit trade	4334.00	loss trade	-1803.00
	Average	profit trade	505.83	loss trade	-379.36
	Maximum	consecutive wins (profit in money)	8 (1684.87)	consecutive losses (loss in money)	11 (-5056.00)
	Maximal	consecutive profit (count of wins)	6790.00 (4)	consecutive loss (count of losses)	-5056.00 (11)
	Average	consecutive wins	2	consecutive losses	2



#	Time	Type	Order	Size	Price	S / L	T / P	Profit	Balance

- GBP/AUD

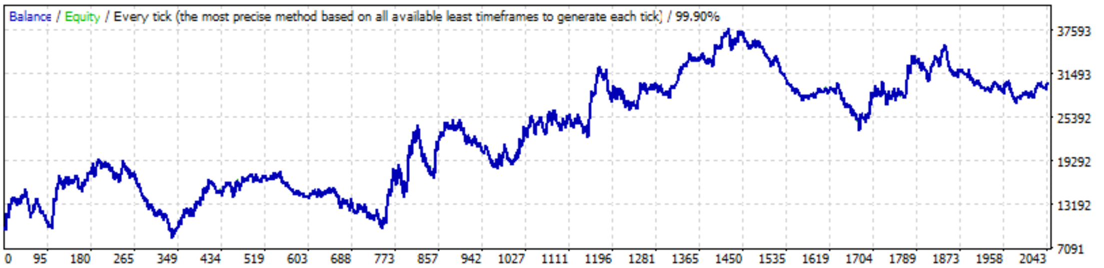
This run shows a 300% gain over the period 2003 -2017 but this should be throttled back as the drawdown is too heavy at 38%. One lot was traded, but it is better to throttle back to 0.2 lots

Strategy Tester Report

SessionBO_EA_v1.0

ICMarkets-Demo02 (Build 1090)

Symbol	GBPAUD (Great Britain Pound vs Australian Dollar)				
Period	15 Minutes (M15) 2003.05.06 07:00 - 2017.07.28 21:45 (1999.01.01 - 2017.07.29)				
Model	Every tick (the most precise method based on all available least timeframes)				
Parameters	Section10="~~~~~~~~~~EA BASIC~~~~~~~~~~"; uiTP=0; sTimeBgn="10:00"; sTimeEnd="11:00"; clBody=Goldenrod; uiEntryWindow=1; sDailyClose="23:45"; dLotValue=1; iMagicNumber=987; bRescale5Digit=true; uiAttempts=10; Section20="~~~~~INFO/MESS PANEL~~~~~"; bInfo=true; uiInfoXCoord=10; uiInfoYCoord=15; bMess=false; uiMessXCoord=240; uiMessYCoord=15; uiMessQuant=15; bMessSound=true; bMessMail=false; bMessPush=false; clrVisTextColor=LightGray; sVisFontName="Courer New"; iVisFontSize=10; clrVisBackColor=LightSlateGray; bVisTransparent=true;				
Bars in test	355924	Ticks modelled	278946470	Modelling quality	99.90%
Mismatched charts errors	0				
Initial deposit	10000.00			Spread	Variable
Total net profit	20178.19	Gross profit	350341.78	Gross loss	-330163.59
Profit factor	1.06	Expected payoff	9.89		
Absolute drawdown	1454.67	Maximal drawdown	14636.29 (38.45%)	Relative drawdown	56.82% (11245.72)
Total trades	2040	Short positions (won %)	1125 (45.60%)	Long positions (won %)	915 (42.62%)
		Profit trades (% of total)	903 (44.26%)	Loss trades (% of total)	1137 (55.74%)
	Largest	profit trade	3319.74	loss trade	-1397.68
	Average	profit trade	387.98	loss trade	-290.38
	Maximum	consecutive wins (profit in money)	8 (1244.15)	consecutive losses (loss in money)	11 (-3888.56)
	Maximal	consecutive profit (count of wins)	5149.94 (4)	consecutive loss (count of losses)	-3888.56 (11)
	Average	consecutive wins	2	consecutive losses	2



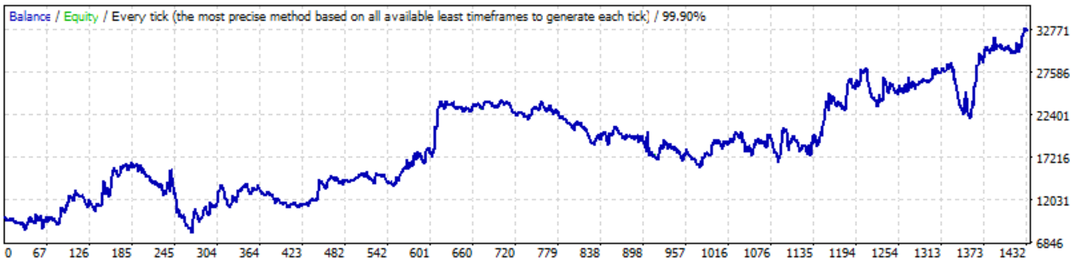
#	Time	Type	Order	Size	Price	S / L	T / P	Profit	Balance

- EURTRY

Whilst this is a very over looked pair running with 5 pips minimum spread each side the following performance was obtained.

Strategy Tester Report
SessionBO_EA_v1.0
ICMarkets-Demo02 (Build 1090)

Symbol	EURTRY (Euro vs Turkish Lira)				
Period	15 Minutes (M15) 2007.03.14 06:45 - 2017.07.28 21:45 (1999.01.01 - 2017.07.29)				
Model	Every tick (the most precise method based on all available least timeframes)				
Parameters	Section10="~~~~~~~~~~EA BASIC~~~~~~~~~~"; uiTP=0; sTimeBgn="10:00"; sTimeEnd="11:00"; clBody=Goldenrod; uiEntryWindow=1; sDailyClose="23:45"; dLotValue=1; iMagicNumber=987; bRescale5Digit=true; uiAttempts=10; Section20="~~~~~INFO/MESS PANEL~~~~~"; bInfo=true; uiInfoXCoord=10; uiInfoYCoord=15; bMess=false; uiMessXCoord=240; uiMessYCoord=15; uiMessQuant=15; bMessSound=true; bMessMail=false; bMessPush=false; clrVisTextColor=LightGray; sVisFontName="Courer New"; iVisFontSize=10; clrVisBackColor=LightSlateGray; bVisTransparent=true;				
Bars in test	255044	Ticks modelled	119336243	Modelling quality	99.90%
Mismatched charts errors	0				
Initial deposit	10000.00			Spread	Variable
Total net profit	22768.57	Gross profit	218552.52	Gross loss	-195783.95
Profit factor	1.12	Expected payoff	15.92		
Absolute drawdown	2078.22	Maximal drawdown	9432.10 (54.35%)	Relative drawdown	54.35% (9432.10)
Total trades	1430	Short positions (won %)	691 (53.40%)	Long positions (won %)	739 (42.63%)
		Profit trades (% of total)	684 (47.83%)	Loss trades (% of total)	746 (52.17%)
	Largest	profit trade	2653.25	loss trade	-1718.16
	Average	profit trade	319.52	loss trade	-262.44
	Maximum	consecutive wins (profit in money)	9 (6279.95)	consecutive losses (loss in money)	12 (-4403.07)
	Maximal	consecutive profit (count of wins)	6279.95 (9)	consecutive loss (count of losses)	-4403.07 (12)
	Average	consecutive wins	2	consecutive losses	2

- 

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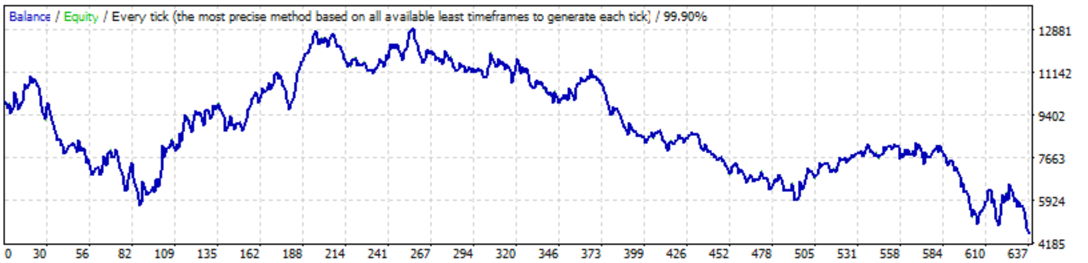
10.3 Non-Trending Pairs

- EUR/GBP

Strategy Tester Report
SessionBO_EA_v1.0
ICMarkets-Demo02 (Build 1090)

Symbol	EURGBP (Euro vs Great Britain Pound)				
Period	15 Minutes (M15) 2003.08.04 23:00 - 2011.03.23 00:45 (1999.01.01 - 2017.07.29)				
Model	Every tick (the most precise method based on all available least timeframes)				
Parameters	Section10="~~~~~~~~~EA BASIC~~~~~~~~~~"; uiTP=0; sTimeBgn="10:00"; sTimeEnd="11:00"; clBody=Goldenrod; uiEntryWindow=1; sDailyClose="23:45"; dLotValue=1; iMagicNumber=987; bRescale5Digit=true; uiAttempts=10; Section20="~~~~~INFO/MESS PANEL~~~~~"; bInfo=true; uiInfoXCoord=10; uiInfoYCoord=15; bMess=false; uiMessXCoord=240; uiMessYCoord=15; uiMessQuant=15; bMessSound=true; bMessMail=false; bMessPush=false; clrVisTextColor=LightGray; sVisFontName="Courer New"; iVisFontSize=10; clrVisBackColor=LightSlateGray; bVisTransparent=true;				
Bars in test	191176	Ticks modelled	121792333	Modelling quality	99.90%
Mismatched charts errors	0				
Initial deposit	10000.00			Spread	Variable
Total net profit	-5390.50	Gross profit	57329.89	Gross loss	-62720.39
Profit factor	0.91	Expected payoff	-8.48		
Absolute drawdown	5397.16	Maximal drawdown	8509.41 (64.90%)	Relative drawdown	64.90% (8509.41)
Total trades	636	Short positions (won %)	347 (53.60%)	Long positions (won %)	289 (47.40%)
		Profit trades (% of total)	323 (50.79%)	Loss trades (% of total)	313 (49.21%)
	Largest	profit trade	1060.06	loss trade	-571.63
	Average	profit trade	177.49	loss trade	-200.38
	Maximum	consecutive wins (profit in money)	16 (3215.65)	consecutive losses (loss in money)	7 (-1515.85)
	Maximal	consecutive profit (count of wins)	3215.65 (16)	consecutive loss (count of losses)	-1718.47 (5)
	Average	consecutive wins	2	consecutive losses	2



11 Test data

The data used to test any EA is of vital importance. If you don't have good data, you might as well give up as any results you obtain will almost certainly be skewed incorrectly.

If you have done any research on the internet about test you will know that when you use Mt4 you should aim for data modelling quality as close to 100% as possible. Frequently 99% is what you will get.

Modelling levels less than 99% will give false and generally over optimistic results.

11.1 Dukascopy

Dukascopy the Swiss FX bank is a recognized source of quality and accurate data. If you visit their website you can download tick data with which to run your tests.

Here is the link

Dukascopy

11.2 Tick Data Story

For ease of use, if you subscribe to Tick Data Story you will be able to obtain Dukascopy data in a form which is very easy to load into your Mt4 platform and the whole process is much more streamlined.

There are a couple of solutions to obtaining data from them, the first is from their Tick Data Lite version the other is from the fully-fledged Tick data Manager.

I personally use the Tick Data Manager

12 Next Steps

2nd Jan 2018 8 AM Live Trading

13 Forward Strategy

- EURUSD 15 min
- EURUSD 1 hour
- GBPAUD 15 min
- GBPAUD 1 hour

14 Questions and what can go wrong

13.1 Drawdown

All EA's go through periods of drawdown that is why they should be run as part of a portfolio.

I aim for drawdowns of no more than 10% on anyone EA.

13.2 Parameters

Even the most organized banks get it wrong, the wrong code released into the wrong environment hat s why there are armies of people watching screens instead of trading in them.

13.3 Leverage

Leverage is the ultimate killer. Take a look at the flagship EA this will only ever go bust and blow due to leverage not the robustness of the strategy itself.

15 Conclusion

I hope you have enjoyed this short descriptive about the Session_BO EA and how to implement it.

Please follow the steps quite carefully so that you implement the EA exactly as foreseen.

If you have questions, please do not hesitate to contact me

paul@exacttrading.com