# BigBob auto-trading EA

## Introduction

The purpose of this guide is *not* to teach you how to trade NB V10. For that, you have to visit Bob's thread and do the required reading. If you cannot be arsed to do this, then bugger off and leave the rest of us alone. You are a cretin who does not deserve our help.

*Officially,* the purpose of this guide is to explain the inputs in BigBob.

*Actually*, the purpose of this guide is to protect me from having to answer stupid questions in the thread, about the inputs in BigBob – inputs whose meanings are so screamingly obvious that only a moron could get them wrong. Ask me questions in the thread whose answers can be found here, and I will give you a verbal savaging the like of which I sincerely hope you have not had to endure before. *If* I am in a good mood at the time.

## Summary

We have two trading styles:

1. **Trend:**
    - If the high and low of the D1 candle are both above the two moving averages, the market is trending up.
    - If the high and low of the D1 candle are both below the two moving averages, the market is trending down.
    - BigBob will only trade the trend if it calculates the D1 volatility to be sufficient to allow a trend to form. The minimum volatility for this defaults to 150 pips movement per day, but you can configure this.
    - There are two ways of adding to your trend-trading position:
        1. Using Caterpillar, described in detail below.
        2. Using the Carolco grid; there is a link in the Inputs section to the post that inspired this.
    - There are a variety of trade-exit features.
    - You can chose to hedge a losing trade following a trend change, to try to exit the position at breakeven or better, rather than accepting exit at a loss.
2. **Range:**
    - If the high or low of the D1 candle are within the two moving averages, the market is ranging and therefore suitable for CTR (counter-trend or range) trading.
    - BigBob will only trade the range if it calculates the D1 volatility to be insufficient to allow a trend to form. The maximum volatility for this defaults to 150 pips movement per day, but you can configure this.
    - As coded, BigBob will only trade the H4 candles to look for a tradable range. Bob manually trades the H1 on some pairs; I have not implemented this in BigBob.
    - Profitable trades will close on an opposite direction signal.
    - Losing trades can be
        - closed at a stop loss (highly, highly **un**-recommended).
        - subjected to Recovery; I have described this at the end of the guide.
        - converted to Trend trades if a trend forms according to BigBob's trend-detection, and closed/hedged/managed accordingly.

## Stealth, criminals, Global Variables and Trade Comments

Newbies, as you move through your Forex train-wreck you will gradually come to

understand one essential point: the criminals ('brokers') are out to get you. They want to separate you from your deposit. From this follows the inevitable conclusion that we need to hide as much of our activity from them as possible. They *hate* successful trading EA's and will take steps to destroy their profitability should they discover that you are using one.

This leaves us with a problem. BigBob needs to know whether a trade it is sent is a trend or a range trade. The easy way is with magic numbers and/or trade comments. The problem here is that magic numbers and trade comments visible by us are also visible to the crims; repeated use of the same mn/tc's are a dead giveaway that an EA is in action.

BigBob overcomes this by using Global Variables. GV's are tiny files that live in your MT4 directories and can contain a numeric value. When it sends a trade, BigBob creates a GV with the chart symbol as its name, and the value 0 or 1 as the file contents:

- 0 = trend trade
- 1 = range trade

On startup, BigBob discovers it has a trade that it owns, and looks for the GV to tell it whether that trade is from a range or a trend, so that it can act appropriately when it comes to trade-exit time.

My opinion of MT4 is well known but I repeat it here for the newbies who do not know me. It is utter, unmitigated, total crap. Any 16 year old computer studies student presenting it as a coding project would fail. I spend half of my life fighting its lunacy. I have no doubt that the rubishy working of MT4 is deliberate coding by the coders on the instructions of the criminals; the less well it works, the better it is for the crims.

This means that *nothing* is reliable, including MT4's Global Variable file creation, so the GV's go missing sometimes. When BigBob opens a trade, it should display the trade ticket number and the nature of that trade on your chart. If the display reads, “None” it means the GV has gone missing and you need to re-create it, so:

- Press the F3 key to bring up the Global Variables window.
- Click the 'Add' button
- Enter your chart symbol into the 'Variable' box
- Select the 'Value' box:
  - If the trade is a trend trade, enter '0' into the Value box
  - If the trade is a range trade, enter '1' into the Value box
  - Click the 'Close' button.
- Drag a fresh instance of BigBob onto your chart, reload your settings from your set file, and the chart display will include the origin of the trade.

Trade comments: each trading origin (Trend, Trend/Caterpillar, Trend/Carolco, Range, Hedge etc) has its own trade comment. This is so that we can see at a glance, which trades were sent by which method. Turn these to blank comments when you take BigBob live; repeated trade comments are a dead give away to the crims that you are using an EA.

**Using BigBob to manage manually-entered trades**

BigBob can manage these, so long as your trades have the same magic number. Manually entered trades automatically have no magic number; BigBob defaults to zero, so it claims ownership of these trades automatically. Greedy hog. Use the Global Variable creation technique I described in the previous section to help BigBob act appropriately.

**Trend trade exits**
There are a variety of ideas for closing these trades (actually, at the time of writing there are two, but I expect others will emerge). I describe them in the 'Trend trade exit strategies' section of 'Specific Trend trading inputs'.

**Caterpillar trend trade entries**
El Dee contacted me to code a trade sender/manager that gradually opens new trades and moves the stops candle by candle – a caterpillar-style movements. This is attached to post 1 and you can use it to send and manage manual trades.

Imagining a sell trade, here is how Cat works:

- drag the robot onto the chart, and set TradeLong to false and TradeShort to true. Cat waits until the formation of a new candle before looking for a trade trigger. First of all, it draws a line at the previous candle's low - (spread - 1 pip).
- at any point after the start of the next candle, the market breaks below the line, so trade 1 is sent. Cat redraws the line at new low - (spread - 5 pips), then stops trading until the start of the next new candle.
- at any point after the start of the next candle, the market breaks the new low and trade 2 is triggered.
    - The stop of trade 1 is moved to breakeven.
    - A new line is drawn at new low - (spread - 5 pips), then stops trading until the start of the next new candle.
- at any point after the start of the next candle, the market breaks the new low and trade 3 is triggered.
    - The stop of trade 2 is moved to breakeven.
    - The stop of trade 1 is moved to the high of the candle one step to the right or the candle in which it was opened.
    - A new line is drawn at new low - (spread - 5 pips), then stops trading until the start of the next new candle.
- at any point after the start of the next candle, the market breaks the new low and trade 4 is triggered.
    - The stop of trade 3 is moved to breakeven.
    - The stop of trade 2 is moved to the high of the candle one step to the right or the candle in which it was opened.
    - The stop of trade 1 is moved to the high of the candle one step to the right or the candle whose high represented the trade's previous stop.
    - A new line is drawn at new low - (spread - 5 pips), then stops trading until the start of the next new candle.
- This process continues until MaxTrades is reached. At this point:
    - Trade MaxTrade's stop is move to b/e asap.
    - As each new low is formed, each trade's stop is moved to the high of the candle after the one that was providing the previous stop. There is always the same distance in candles between the candle-high stops of each trade.
- Eventually, a market retrace will take out all the trades one after the other in reverse order to their opening - either that or the trader has made so much money that he closes the entire position and retires to the Seychelles.

I have implemented Caterpillar as part of BigBob's trend trading functionality, and describe the inputs later.

Note: you can adjust the Cat lines manually; both bots will respond to your changes and look for fresh trades at the new price.

**Incorrect range/trend display**
BigBob overrides the actual trend detection if there is an open trade. It will display the trend/range according to the origin and type of the open trade. For example, imagine the market has moved to a range status but there is a trend buy trade open; BigBob will display an uptrend even though this is incorrect.

The rationale is that there is no sense in managing a trade taken from one set of circumstances by those of a different one. This may change with experience.

**BigBob's inputs**

Most of the inputs are straightforward. Some that might need explanation are:

- **StopTrading, TradeLong and TradeShort:** these allow you to control the trading direction or even stop trading altogether if all you want BigBob to do is manage an open trade.
- **Magic number and trade comment:** leave these alone unless you know what you are doing.
- **CriminalIsECN:** set this to true if your criminal insists on two-stage order-sending. This is irrelevant if you do not use StopLoss and TakeProfit. Remember that IBFX are ECN even though they do their best to hide this fact and stop all their 'valued clients' actually sending any trades.
- **MaxSpread:** this is the maximum spread you will accept on a trade. It should be set on a pair-by-pair basis when trading live. Some pairs have narrow spreads, whilst others are quite wide, whilst others are *monstrous* and best avoided. At major news-release time, the crims will typically widen their spreads to ruinously wide extents, so this filter helps avoid trading at times of extreme volatility,
- **Trade balance filters:** these help you to avoid entering trades that could prove detrimental if the market turns against you for a particular currency, and to avoid entering trades at news-release times.
    - **UseZeljko:** named after Zeljco who corrected the code for this filter and made it work. This filter ensures 'balanced' trading. The easiest way to describe it is to use hypothetical trades. Imagine that:
        1. BigBob buys GBPUSD.
        2. BigBob buys GBPJPY. You are now heavily exposed to GBP.
        3. Something unexpected happens (and something unexpected *always* happens in Forex) and the pound plummets, dropping like a stone into the abyss. Both your trades scream into huge drawdown.
        4. To avoid this, having taken the GBPUSD trade, BigBob will not buy another GBPxxx pair. Imagine instead that a Sell GBPJPY trade arises, just before the market plummets. This time, your GU trade is screaming into the abyss, but your GJ trade is going stratospheric. One trade 'balances' the other in the event of something dramatic happening.
    - **OnlyTradeCurrencyTwice:** works in conjunction with UseZeljko. Again, imagine the above scenario nos 1 & 4. Now you have a GU Buy and a GJ sell open – perfectly balanced trades. If you now further trade any pair involving GBP, you will unbalance your trading again, leaving you exposed to unexpected events. This filter prevents a third trade being opened involving GBP.
    - Note: both UseZeljco and OTCT work more deeply than the example I have just given. For example, now you have a GU buy open, balanced trading does not

allow a further buy xxxUSD trade to open, only a sell xxxUSD – then OTCT kicks in again..... Got a headache yet?

- **Swap filter:** some pairs have dreadful swap in one direction. This filter allows you to avoid trading pairs in the direction that would cost a fortune in swap. How much relevance this has to a system that could follow a trend for hundreds of pips is open to debate, but once you have seen one of these adverse-swap pairs hang around going nowhere for a couple of weeks, you will see why a lot of us want nothing to do with them.
- **Volatility:** Bob appears to be saying that volatile pairs are best for trend trading, whilst sleepy pairs are best for range trading. Bob is a genius and I am a dipstick, so I am not going to argue. In deciding whether to trade the trend or the range, BigBob calculates the volatility of a pair by calculating the sum of difference between the high and low each day for LookBackDays, then dividing the result by LookBackDays to leave an average pips movement per day – the pairs 'volatility' measure. How this is used is described later, but to give you an idea of what the values mean:
  - the calculated average is usually below 300 pips movement a day, so:
    - <75 means the pair is somnolent and rarely has the energy to breathe, let alone move.
    - >250 means the pair is psychotically deranged and probably needs psychiatric help.
- **Trend detection moving averages:** the defaults are those specified by Bob. Play with them only if you know what you are doing. I include them for the inveterate tinkerers at FF, not for anyone with the vaguest hint of sanity in their nature.
- **Specific Trend trading inputs:** some decisions to make here:
  - **AllowTrendTrading:** turn this to false if you only want to trade the range. Gosh. *What* a surprise.
  - **OnlyTradeStartOfTrend:** this is an idea suggested by batemap. If set to 'true', this tells BigBob to enter a trade only if the previous candle was ranging. The idea is to prevent taking trades when the trend has already started to run out of steam. It will prevent a large number of trades, but those it allows should be safer.
  - **MinimumTrendTradingVolatility:** below this figure, BigBob will not attempt to jump on a trend. The default lies roughly in the middle of the average volatility span of the currencies, but is basically a guess. Pairs with a volatility of under this input are considered too dozy ever to mount a trend movement and so will only ever be allowed to trade the range. Allow both trend and range trading by entering zero.
  - **MinTriggerCandlePipsMovement:** the minimum D1 candle size that you will allow to trigger a trend trade. Default is another guess.
  - **TrendConfirmationCandleTF:** TF is short for Time Frame. BigBob looks for conformation that the market is moving in the direction of a proposed trade by consulting a the previous lower time-frame candle, which must be going in the direction of the trade to confirm the trigger. The default is the M15 candle – another guess.
  - **Caterpillar:** this is the implementation of the separate EA I described earlier. The inputs that concern you are:
    - **MaxTrades:** the maximum no of caterpillar trades you wish to see open.
    - **MinPipsBetweenCandles:** the minimum number of pips between the open price of new trades following the break of the new hi-lo.
    - **CatTimeFrame:** you can look for new highs and lows at the start of

different time-frames. Enter your chosen tf in minutes, so the default is the H1; H4 would be 240; D1 would be 1440 and so on.

- **CarolCo:** this is another staggered trade entry system first suggested by carolco. Read about it at http://www.forexfactory.com/showthread.php?p=4887703#post4887703. Don't skimp on reading this, because BigBob defaults to trading this grid system. The inputs are:
  - **UseCarolco**
  - **CarolcoGridLot:** the two market trades are sent with the lot size you entered into the Lot input. The pending grid trades offer the option to send these using CarolcoGridLot size instead.
  - **UseCarolcoStopLoss:** set this to 'false' to tell BigBob not to send stop losses with the grid trades. You will need to manage them with the mptm management functions.
  - **TradesInGrid:** the number of pending trades to send.
  - **PipsBetweenTrades:** the distance between pending trades – also the stop loss and take profit for each trade.
- **Trend trade exit strategies:**
  - **osthafen's candlestick median:** this is BigBob's default strategy.
    - osthafen came up with this idea to avoid premature trade closure, when the D1 hi-lo moves to the wrong side of the fast moving average but the market then resumes the trend: only close the trade if the mid-point ('median' of the candle crosses the fast MA in the wrong direction. The inputs are:
      - **UseOsthafen:** defaults to true.
  - **Dragosd1:** the default is a moving average somewhere between the fast and slow MA's that are used in trend-detection. The moving average inputs are the same sort of thingy as those of the trend-detection inputs, so read them for details. Separate to this strategy are:
    - **UseTouch:** closes the trade at a touch/breech of the MA.
    - **UseClose:** closes the trade if the candle indicated by DragMaTdTF *closes* on the wrong side of the fast moving average.
  - **Opposite trade signal:** closes a trade when BigBob detects a trend in the opposite direction. Set **UseOppositeSignal** to true to use this.
- **Hedging losing trend trades:**
  - This is not currently available to US citizens. Instead of accepting a loss when there is a change of trend-direction, BigBob offers the facility to hedge the losing trade at a greater lot size. Once the hedged pair reach breakeven or better, BigBob will close the trades. To take advantage of this:
    - select one of the trend trade strategies (osthafen, Dragosd1 etc). I suggest the Opposite trade signal, as this does not look at closing the trade until there is a clear trend-change. Then set your inputs:
      - **UseHedging:** true to use hedging.
      - **HedgeLotMultiplier:** the multiplication factor for the lot size of the original trade. The default of 3 appears to work remarkably well in back-testing, but is really just a guess.
      - **HedgeProfitTarget:** your breakeven target. Pure breakeven would be a value of zero. The default of 100 locks in a decent profit.

- **Specific Range trading inputs:** some more decisions to make here:
  - **AllowRangeTrading:** turn this to false if you only want to trade the trend.
  - **TradeEveryTick:** enable this to look for a new range trade at every tick rather

than waiting for the opening of a new candle.
    - **MaximumRangeTradingVolatility:** any pair with a volatility calculation above this figure is considered too volatile for range trading and will only trade the trend. Allow both trend and range trading by entering a high input such as 100000.
    - **AllowChangeOfOriginToTrend**: if 'true', this allows BigBob to convert a Range trade to a Trend trade, should the market go off on one of its benders and leave a range trade looking silly. You should only use this if you can use hedging. To use it:
        - Turn on trend trading.
        - Turn off Recovery (see below).
        - Turn on Hedging.
        - Turn on UseOppositeSignal in the Trend-trade exit section.
    - **Recovery:** there is a brief description of how this works at the end of this guide, but you really need to have studied Bob's threads to understand it fully.
        - **UseRecovery:** turns this on/off.
        - **RecoveryLevels:** this is a new slant on previous Recovery coding and allows users to have unlimited levels of Recovery. Simply enter your levels into the box, separated by a comma and BigBob will construct them for you. L1 is implied by the first range trade, so the default of “2,6” implies 1.2.6 Recovery, or trades up to and including L3. A couple more examples:
            - “1,2,4” implies 1.1.2.4, or trades up to and including L4.
            - “2,6,12” implies 1.2.6.12, or trades up to and including L5.
        - **ReEntryLinePips:** sets where to draw the re-entry line. Leave at zero and BigBob will calculate this for you based on the daily Volatility calculation.
        - **ReEntryLineVolMult:** rather like those Atr multipliers, this allows you to use multiples of Volatility to calculate where the re-entry line should go.
- **Margin checks:** these help avoid over-trading by limiting the number of trades that can be opened. BigBob will make the calculations before sending a trade and abort if there is insufficient margin to allow further trading. There are two to chose from; the default indicates my preference.
    - **Scoobs** check: scooby-doo is a former pro trader with the big banks; we have benefited hugely from his advice. This filter compares the current account margin with the free margin  divided by 100, and aborts the trade if the margin is greater than the result of this calculation.
    - **ForexKiwi** check.ForexKiwi contributed this filter. It looks at the margin percent figure and aborts the trade if yours is less than the figure you specify in FkMinimumMarginPercent.
- **Trading hours:** allow you to specify when BigBob is allowed to trade. These are best left to trade 24 hours by default, but users can specify trading times if they wish.

The remaining inputs are all about individual trade management. Management is a cut-down module from Multi-purpose trade management EA available from http://www.forexfactory.com/showthread.php?t=89371. The full management EA has a wide range of extra features. There is a User Guide to describe the inputs, so please download this to see how BigBob's mptm features work.

# The RECOVERY SYSTEM for Range trading

Nanningbob's Recovery system is based on this very simple principle: no matter how far a market moves, it *will* retrace eventually. As I often put it, “Dem markets dey go up, den dey go down again, den dey go up again, den.....”

So, rather than insert a conventional stop loss and crying when it is hit, Recovery allows you to ride the move against you and enter with additional trades when the moment is right.

In Nanningbob-style trading, we talk about trades at Level 1, Level 2, Level 3 and Level 4. Level 1 is the initial trade. Levels 2+ are Recovery trades. Early Recovery grids were 1.1.3.3. and 1.1.2.4 The digits in the 1.1.3.3 and 1.1.2.4 refer to multipliers of the initial lot size So:

- in 1.1.3.3 (would be represented in RecoveryLevels as “1,3,3”):
- 1 is the L1 trade (Level 1 or initial trade) at your chosen lot size
- 1 is the L2 trade at your chosen lot size
- 3 is the L3 trade at your chosen lot size x 3
- 3 is the L4 trade at your chosen lot size x 3

- in 1.1.2.4(would be represented in RecoveryLevels as “1,2,4”):
- 1 is the L1 trade (Level 1 or initial trade) at your chosen lot size
- 1 is the L2 trade at your chosen lot size
- 2 is the L3 trade at your chosen lot size x 2
- 4 is the L4 trade at your chosen lot size x 4

BigBob will only send Recovery trades when:

- The trade has moved ReEntryLinePips against you **and**
- The conditions are correct to enter a L1 trade. It will **not** merely send a trade because the market has moved x pips against you. In other words, it trades Recovery as it trades normally.

Here is how it works. Imagine you are using 1.1.2.4 and RecoveryLinePips = 100 (proper pips, not 5 digit wally-plonker-dipstick-crim points):. For the purpose of this example, imagine that 1 pip = $1:

- An L1 sell trade fills. The market continues to rise and goes 100 pips against your trade.
- BigBob looks for an opportunity to enter an L2 sell trade at your normal lot size. This arises, so you have two trades open:
- L1 is -$100
- L2 has just opened at your normal lot size.
- The market co-operates and begins to fall. If falls 50 pips. At this point:
- L1 is -$50
- L2 is +$50
- so the position is at breakeven and can close
- Suppose the market refuses to cooperate and rises another 100 pips, so now:
- L1 is -$200
- L2 is -$100
- BigBob looks for an opportunity to enter an L3 sell trade at double your normal lot size. This arises, so you have three trades open::

- L1 is -$200
- L2 is -$100
- L3 has just opened
- The market co-operates and begins to fall. Because your L3 trade is at double your lot size, we double the effect of the L3 on the open basket of trades. The market falls 75 pips
- L1 is -$125
- L2 is -$ 25
- L3 is +$150
- so the position is at breakeven and can close
- Suppose the market refuses to cooperate and rises another 100 pips, so now:
- L1 is -$300
- L2 is -$200
- L3 is -$200
- BigBob looks for an opportunity to enter an L4 sell trade at four times your normal lot size. This arises, so you have four trades open::
- L1 is -$300
- L2 is -$200
- L3 is -$200
- L4 has just opened
- The market co-operates and begins to fall. Because your L4 trade is at double your lot size, we quadruple the effect of the L4 on the open basket of trades. The market falls 90 pips
- L1 is -$210
- L2 is -$110
- L3 is -$20
- L4 is +$360
- so the position plus a few, is at breakeven and can close

The reality is that L3 is rarely reached, although it does happen occasionally. I have yet to reach L4 in my live or demo trading. It will happen one day, but you can see that this involved a *huge* movement against my original trade.

This process is self-limiting and holds within it the means to get out of an increasingly nasty situation. Once a your maximum Recovery trades are sent, BigBob can do no more and it is up to traders to manage their way out of the situation. Turn off the bot. Suppose the market continues to move against the trade and moves a further 100 pips against us?

- Now we have:
- L1 is -400 (original lotsize)
- L2 is -300 (original lotsize)
- L3 is -200 (original lotsize x 2)
- L4 is -100 (original lotsize x 4)
- From here, we start closing trades in the order of oldest first. A re-entry opportunity arises so we::
- Close the L1 trade and cry
- Mentally move all the trades down a level, so the old L2 is now L1, old L3 is now L2 and old L4 is now L3
- We start the lot size process afresh, so the new L4 trade is the original lot size.

Reaching the point described in the last paragraph would not be a happy experience, but it

is important to remember that **there will never be more than 4 trades open**, so we cannot blow our accounts unless we start with an oversized lot size to kick off with. The worst losing trades always get kicked off the end. It will make a dent in the account, but will take a long time; in the meantime, other successful trades are continually adding to the balance to offset the problem.

Mind, if *this* does not convince you to trade tiny lot sizes, then you are an idiot and should be shot.

Also, if it makes you want to use stop losses instead then go ahead and try them. You *might* keep it up for a week, if you are absolutely determined to ignore the advice of all the experienced traders that sl's and this trading system do not go together; I doubt it.

**Disclaimer and Risk Disclosure:**

*Trading foreign exchange on margin carries a high level of risk, and may not be suitable for all investors. The high degree of leverage can work with as well as against you. Before deciding to invest in foreign exchange you should carefully consider your investment objectives, level of experience, and risk appetite. The possibility exists that you could sustain a loss of some or all of your initial investment and therefore you should not invest money you cannot afford to lose. You should be aware of all the risks associated with foreign exchange trading, and seek advice from an independent financial advisor should you have any doubts.*

I will put this a tad more bluntly:
Most Forex traders lose all their money.

- Using BigBob in trading Forex does not guarantee success.
- Trading with BigBob could lead to serious financial loss.
- Trading BigBob without understanding its underlying trading strategies *guarantees* traders will lose their money.

Good luck. Have fun.