

Forex Helper Sheet

A *Google Sheets* spreadsheet to help visualize spreads and margins for prospective FOREX trades.

Optionally creates a *basket* of trades for importing into [Interactive Brokers TWS platform](#).

Getting Started

These instructions will get you a copy of the spreadsheet up and running in your own Google account.

At present, this *only* exists for Google Sheets. There is no LibreOffice or Excel version available.

Prerequisites

You need a Google account to make a copy of this spreadsheet and store it in your Google drive.

An Interactive Brokers account is *not* required.

Installing

1. Grab a copy of the [latest version of the spreadsheet here](#)
2. Google will ask for your authorization the first time you open the sheet. This is normal and nothing to be worried about. The sheet can not modify your Forex account in any way. If you are at all unsure, you can review the source code here in GitHub.

Disclaimer: This spreadsheet comes with no warranty whatsoever. If you use it as an aid in your Forex trades, or elsewhere, you do so completely at your own risk.

Configuration

Warning Levels

Choose the *Config* sheet and set the following values according to your own preferences.

	A	B	C
1	Configuration Variables		
2	Risk Warning (Account Currency)	300	<i>Risk amounts greater than this level (in account currency) are highlighted in yellow</i>
3	Risk Maximum (Account Curren	500	<i>Risk amounts greater than this level (in account currency) are highlighted in red</i>
4	Margin Warning	2,000	<i>Margin requirements greater than this level (in account currency) are highlighted in yellow</i>
5	Margin Maximum	2,500	<i>Margin requirements greater than this level (in account currency) are highlighted in red</i>
6	Reward:Risk Warning	1.5	<i>Reward to Risk ratios less than this level are highlighted in yellow</i>
7	Reward:Risk Minimum	1.0	<i>Reward to Risk ratios less than this level are highlighted in red</i>
8	Account Currency	USD ▾	<i>Currency to calculate margins and convert spreads, risks and rewards to.</i>

The only required configuration option is the *Base Currency* which can be changed at any time.

The warning and maximum thresholds are purely informational and not required.

Variable	Value	Notes
Risk Warning (Account Currency)	300	Risk amounts greater than this level (in account currency) are highlighted in yellow
Risk Maximum (Account Currency)	500	Risk amounts greater than this level (in account currency) are highlighted in red
Margin Warning	2,000	Margin requirements greater than this level (in account currency) are highlighted in yellow
Margin Maximum	3,000	Margin requirements greater than this level (in account currency) are highlighted in red
Reward:Risk Warning	1.5	Reward to Risk ratios less than this level are highlighted in yellow
Reward:Risk Minimum	1.0	Reward to Risk ratios less than this level are highlighted in red
Account Currency	USD	Currency to calculate margins against and convert spreads, risks and rewards to.

An example using the value above could look something like this:

- In the second trade line, the margin requirement of \$2,389 is highlighted yellow, representing a warning level as it is greater than the \$2,000 warning level defined above.
- In the fourth trade line, the Reward:Risk ratio of 3.5 is highlighted in green as it is greater than the threshold of 1.5 defined above.

K	L	M	N	O	P	Q	R
SIZE					REWARD : RISK		
Base	Quote	Account	Margin Requirement		Reward Spread	Ratio	Risk Spread
25,000	31,318	28,986	725	USD	0.00728	1.4	0.00517
105,000	101,904	79,643	2,389	USD	0.00289	1.2	0.00242
70,000	76,712	53,095	1,593	USD	0.00611	0.9	0.00644
75,000	8,455,425	75,834	2,275	USD	0.601	3.5	0.17

As mentioned previously, these levels are completely optional. If you don't wish to have highlighting, you can simply set them to arbitrarily high or low values. They are helpful however even as a typo-catching mechanism -- it's very easy to accidentally add an extra zero or reverse the stop loss and profit taking levels.

Trade Sizes

Choose the *Broker* sheet to configure the standard lot sizes and margin requirements for each currency.

	A	B	C	D	E	F
1	Amount based on \$25,000USD					
2	<i>Note that margin calculations are approximate and depend on the actual account balance composition and current exchange rate</i>					
3	Interactive Brokers					
4	Currency	Currency Description	Minimum Order Size	Margin Requirement	Ratio	Rate in Account Currency
5	AUD	Australian Dollar	35,000	3.0%	33:1	0.76073000
6	CAD	Canadian Dollar	35,000	2.5%	40:1	0.78650000
7	CHF	Swiss Franc	25,000	3.0%	33:1	1.00918361
8	CNH	China Renminbi (offshore)	150,000	15.0%	6:1	0.15092745
9	CZK	Czech Koruna	540,000	5.0%	20:1	0.04625609
10	DKK	Danish Krone	150,000	10.0%	10:1	0.15885624
11	EUR	Euro	20,000	3.0%	33:1	1.18195000
12	GBP	British Pound Sterling	20,000	5.0%	20:1	1.32405000
13	HKD	Hong Kong Dollar	200,000	12.0%	8:1	0.12806803
14	HUF	Hungarian Forint	6,600,000	5.0%	20:1	0.00378874
15	ILS	Israeli Shekel	90,000	5.0%	20:1	0.28460258
16	JPY	Japanese Yen	3,000,000	3.0%	33:1	0.00889600
17	KRW	Korean Won	50,000,000	10.0%	10:1	0.00091280
18	MXN	Mexican Peso	450,000	10.0%	10:1	0.05255223
19	NOK	Norwegian Krone	200,000	3.0%	33:1	0.12226286
20	NZD	New Zealand Dollar	35,000	3.0%	33:1	0.68780000
21	PLN	Polish Zloty	90,000	5.0%	20:1	0.27895170
22	RUB	Russian Ruble	2,000,000	20.0%	5:1	0.01677175
23	SEK	Swedish Krona	200,000	3.0%	33:1	0.11946430
24	SGD	Singapore Dollar	35,000	5.0%	20:1	0.73855254
25	THB	Thai Baht	820,000	10.0%	10:1	0.03045995
26	TRY	Turkish Lira	100,000	10.0%	10:1	0.25923528
27	USD	US Dollar	25,000	2.5%	40:1	1.00000000
28	ZAR	South African Rand	350,000	5.0%	20:1	0.07078301
	Add	1000	more rows at bottom.			

The **minimum order size** can be:

- The minimum your broker considers to be a *lot*. Trading less than this amount will usually mean you will not get filled at the market price.
- Your preferred lot size. There is a multiplier on the actual *entry* sheet. So if you define a lot size (minimum order) as 50,000 and you enter a trade as 3 lots, the sheet will use 150,000 as your trade size.

The margin requirement is used for margin calculations in the *entry* sheet. Note that depending on the broker and your particular account type and composition, the margin calculations can get quite complicated. This

spreadsheet uses a simple approach to give you a rough guide. The formula is:

```
1 =arrayformula(vlookup(D5:D,BrokerRequirements,4)*K5:K*GOOGLEFINANCE("CURRENCY:"&$D
2
3 or in English:
4
5 (Trade Size) * (Margin Requirement) * (Account Currency Exchange Rate)
```

Operation

The *Entry* sheet is where all trades are entered and analysed. The important areas and functions are as follows:

ForexHelper.Development

File Edit View Insert Format Data Tools Add-ons Help Forex All changes saved in Drive

Comments Share

100% % \$.00 123 - Calibri 11 - B I U A -

Buttons (1)

The group of 3 blue buttons, toggles the visibility of the various currencies (items #7, #8 and #9). This is useful to de-clutter the screen when you only want to focus on your base currency for example.

The *Generate Basket* button will [create a CSV file](#) suitable for importing into Interactive Brokers TWS platform.

The *Archive Inactive* button will move all trade lines that are marked *Expired*, *Cancelled*, *Closed* etc to the *Archive* sheet. This is not reversible.

The *Live Chart* button will pop up a chart of all the *active* trade lines.

Forex Menu (2)

Menu options exist for each of the buttons [listed above](#).

Trade Parameters (3)

The columns in the *trade parameters* section are the only ones editable (the rest are calculated). The columns are defined as:

Column	Description
Status	A fixed list of statuses used to separate trades. See below for the complete list.
Source	<i>Optional.</i> A mnemonic or other key to segregate orders. You may use different algorithms for example to generate trade ideas -- each one with a different "key".
Date	The date of the trade idea, not necessarily the execution date.
Base	The <i>base</i> currency -- the first currency of the pair, eg. EUR .USD
Quote	The <i>quote</i> currency -- the second currency of the pair, eg. EUR. USD
Order	BUY or SELL
Lot	How many lots to trade. The lot size is defined in the Broker sheet (see above).
Entry	Entry price
Stop Loss	Stop loss price
Target Price	Target (profit) price

Order Status	Can be Archived?	Can Add to Basket?	Notes
Pending	No	Yes	Only trades in <i>Pending</i> status will be selected to generate a <i>TWS Basket Order</i> (See below)
Submitted	No	No	An informational status only. Has no effect.
Working	No	No	An informational status only. Has no effect within the spreadsheet
Closed - Profit	Yes	No	These trades will be archived when the <i>Archive Inactive</i> button is clicked.
Closed - Loss	Yes	No	These trades will be archived when the <i>Archive Inactive</i> button is clicked.
Expired	Yes	No	These trades will be archived when the <i>Archive Inactive</i> button is clicked.
Cancelled	Yes	No	These trades will be archived when the <i>Archive Inactive</i> button is clicked.

Order Size (4)

Order sizes are calculated base on the broker minimums or lot sizes that you have configured (see above) and the Lot column from the [trade parameters section](#) (above).

The formulas are as follows:

- 1 | $\text{Base Size} = (\text{Broker Minimum Size}) * (\text{Lot})$
- 2 | $\text{Quote Size} = (\text{Base Size}) * (\text{Entry Price})$
- 3 | $\text{Account Size} = (\text{Base Size}) * (\text{Current Exchange Rate to Account Currency})$

Margin Requirement (5)

The margin requirement is an approximation bases on the following simple formula:

```
1 =arrayformula(vlookup(D5:D,BrokerRequirements,4)*K5:K*vlookup(D5:D,BrokerRequirements,4))
2
3 or in English:
4
5 (Broker Margin Rate) * (Trade Size) * (Current Exchange Rate to Account Currency)
```

Reward:Risk (6)

Reward to risk ratios are simple calculations:

```
1 Reward Spread = (Target price) - (Entry Price)
2 Ratio = (Reward Spread) / (Risk Spread)
3 Risk Spread = (Stop Loss Price) - (Entry Price)
```

Note that all calculations use *absolute values* (no negatives).

Account Currency (7)

The same calculations as above but expressed in the account's currency. [See configuration section](#).

Base Currency (8)

The same calculations as above but expressed in the base currency (first currency in the pair).

Quote Currency (9)

The same calculations as above but expressed in the quote currency (second currency in the pair).

Order Basket

If you have the Interactive Brokers TWS platform, you can generate a *basket trader* import file with one click.

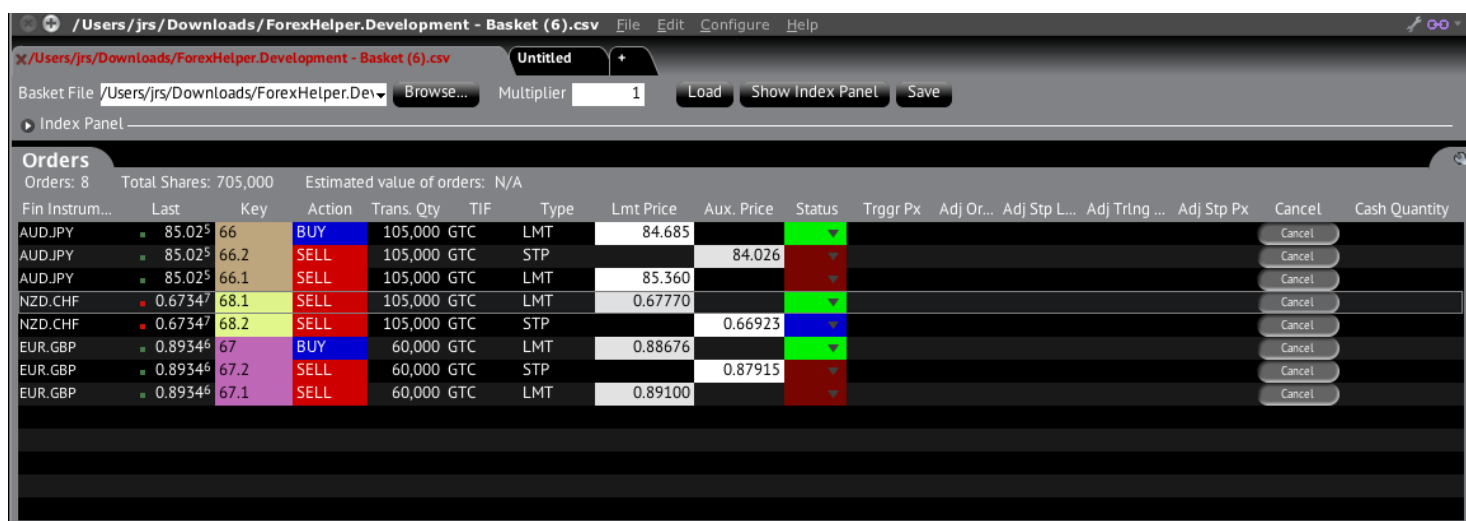
1. On the *Entry* sheet, make sure you have at least one trade row in *pending* status. The sheet will not generate basket orders for any other status as it assumes they have already been processed through TWS.
2. Click the *Generate Basket* button at the top, (or the *Generate Basket* menu item under *Forex).
3. The *Basket* sheet tab will be selected and you should see something like this:

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	https://docs.google.com/spreadsheets/d/1yJWKYG8rMHFvmMPjgbHO1NvaBC0h-6A6OUNoBEDceuA/gviz/tq?txq=out:csv;outFileName=IBbasket.csv&sheet=Basket												
2	Action	Quantity	Symbol	SecType	Exchange	Currency	TimeInForce	OrderType	LmtPrice	AuxPrice	OrderId	ParentOrderId	BasketTag
3	BUY	105000	AUD	CASH	IDEALPRO	JPY	GTC	LMT	84.68500		1		fhelper-MM-2017.11.16
4	SELL	105000	AUD	CASH	IDEALPRO	JPY	GTC	LMT	85.36000			1	fhelper-MM-2017.11.16
5	SELL	105000	AUD	CASH	IDEALPRO	JPY	GTC	STP		84.02600		1	fhelper-MM-2017.11.16
6	BUY	60000	EUR	CASH	IDEALPRO	GBP	GTC	LMT	0.88676		2		fhelper-MM-2017.11.16
7	SELL	60000	EUR	CASH	IDEALPRO	GBP	GTC	LMT	0.89100			2	fhelper-MM-2017.11.16
8	SELL	60000	EUR	CASH	IDEALPRO	GBP	GTC	STP		0.87915		2	fhelper-MM-2017.11.16
9	BUY	105000	NZD	CASH	IDEALPRO	CHF	GTC	LMT	0.67284		3		fhelper-MM-2017.11.16
10	SELL	105000	NZD	CASH	IDEALPRO	CHF	GTC	LMT	0.67770			3	fhelper-MM-2017.11.16
11	SELL	105000	NZD	CASH	IDEALPRO	CHF	GTC	STP		0.66923		3	fhelper-MM-2017.11.16

The first line contains a clickable URL to the basket file in CSV format. Clicking it will download the file to your computer.

Each column refers to a field as [specified by TWS](#).

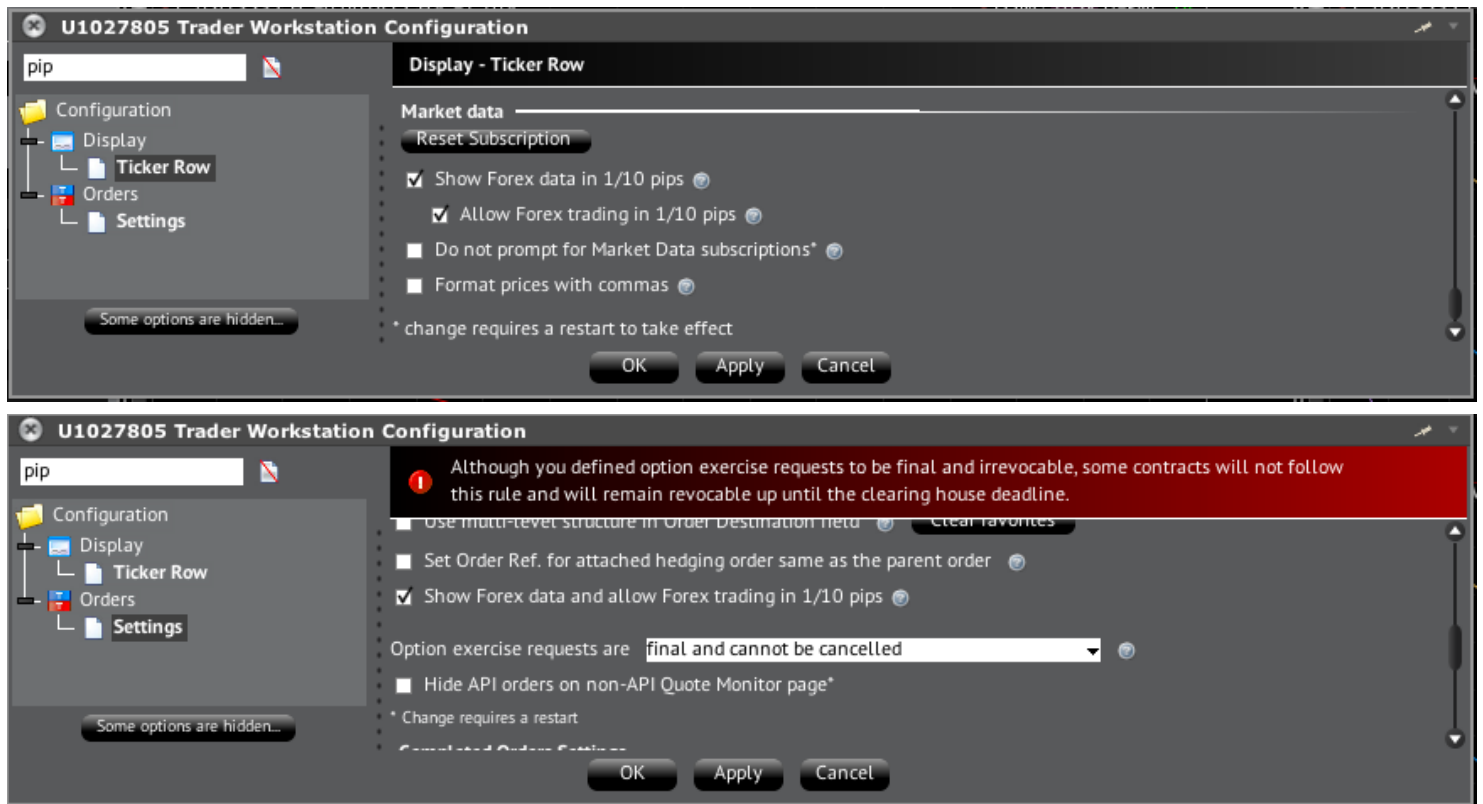
To import it into TWS, open the *BasketTrader* window, click *Browse* to find the file you downloaded above and then click *Load*.



Using BasketTrader is beyond the scope of this document. Interactive Brokers has some resources:

- [TWS Basket Trader Webinar Notes](#)
- [Basket Trader](#)

There is one caveat. You **must** configure TWS to display and trade in 1/10 of a pip instead of 1/2. The file that is generated from ForexHelper uses 1/10 precision by default and TWS BasketTrader will reject the orders if not configured properly.



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