

TRADE GLOBAL, MARKET-NEUTRAL SPREADS THROUGH REFINITIV™ REDI® EMS

Spread Trader

With Refinitiv™ REDI® EMS Spread Trader, users can easily trade pairs of equities and futures using a variety of market-neutral strategies – including ratio, risk arbitrage and relative price – designed to help maximize spread capture and minimize execution risk.

Multi-strategy

- Leverage ratio, price differential and relative change strategies
- Persistent spreads across trading sessions
- Real-time FX rates for cross-border and notional-based trading

Spread management

- Blotter shows detailed status of spreads, legs and child orders
- In-grid formatting highlights exceptions (e.g., suspended spreads)
- Ability to manually “catch up” and split orders against pairs
- Risk controls for order quantity, value and more
- Simple workflow to enable/disable spreads

Global broker network

- Access REDI EMS’s extensive global network of brokers for smart order routing and direct market access
- Route all legs to the same broker or choose to split legs across different brokers

Child order management

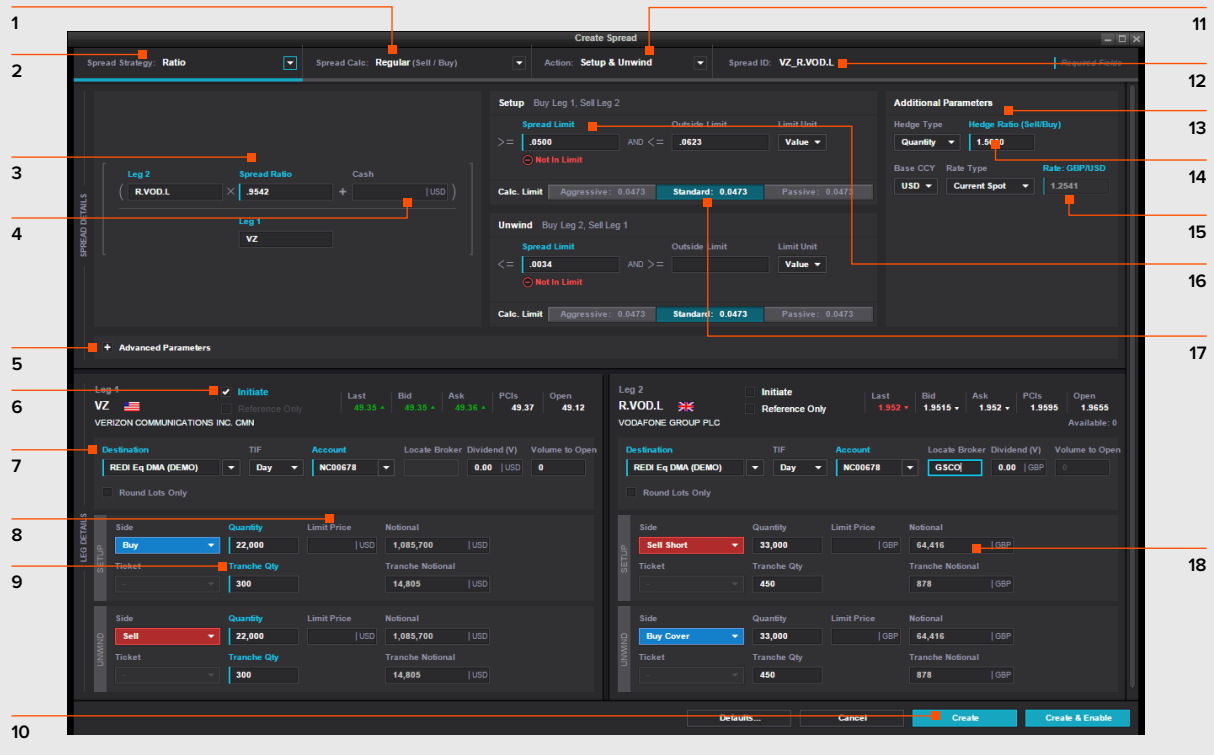
- User-defined initiation method and discretion
- Manage hedge risk by setting unhedged limits
- Volume constraints to dictate participation strategy
- Aggressiveness settings to balance across execution quality, liquidity capture and hedge risk preferences

Spread blotter

Spread Trader														
+ New Spread		Risk Controls		Disable All		Enable All		Audit Trail		Export Data		Settings		Search
Create Spreads				Manage Spreads								Search		
Spread ID	Submission Time	Status	Strategy	Condition	Spread Calc	Aggression	Setup Prox %	Setup Limit	Limit Unit	Spread Mid	Setup % Complete	Total % Complete	Setup Quantity	Setup P
R.VOD.L_R.FTE.DE	2016-07-15 12:19:22	⏻	Risk Arb	In Limit	Regular	Standard	In Limit	11.0200	Value	12.1686	0 %	0 %	40,000	333
FB_AAPL	2016-05-03 13:37:28	⏻	Ratio	In Limit	Regular	Standard	In Limit	0.5000	Value	0.9303	30 %	30 %	2,000	250
FB_AAPL_001	2016-06-07 13:24:04	⏻	Ratio	In Limit	Regular	Standard	In Limit	0.7000	Value	0.9303	10 %	10 %	2,000	250
TWTR_FB	2016-05-02 14:07:52	⏻	Ratio	Suspended	Regular	Standard	5.41 %	8.0000	Value	7.5669			200	14
Brian_Thursday	2016-06-23 10:17:46	⏻	Ratio	Suspended	Regular	Aggressive	In Limit	4.0000	Value	7.5625			10,000	735
BABA_YHOO	2016-09-13 17:39:27	⏻	Ratio	In Limit	Regular	Standard	In Limit	0.1000	Value	0.4344	3 %	3 %	8,000	581
test_spread	2016-08-01 11:13:59	⏻	Risk Arb	Not In Limit	Regular	Standard	76.79 %	900.0000	Value	208.8600			150,000	24,298
VOD_R.VOD.L	2016-06-02 09:54:20	⏻	Ratio	In Limit	Regular	Aggressive	In Limit	0.0900	Value	0.0985			2,000	27

Spread ID	Leg #	Initiating	Action	Symbol	Side	Bid	Ask	Last	Destination	Account	Locate Broker	% Unhedged	Max % Unhedged	Qty	Notional	Ex
BABA_YHOO	1	✓	SETUP	BABA	Buy	101.3000	101.3200	101.3100	REDI Eq DMA...	DEMO2		300.00 %	300 %	4,000	405,240	
BABA_YHOO	2		SETUP	YHOO	Sell S...	44.0000	44.0100	44.0050	REDI Eq DMA...	DEMO2			300 %	4,000	176,020	

Ord Update Time	Spread ID	Leg #	Initiating	Ord ID	Status	Symbol	Side	Qty	Exec Qty	Avg Exec Price	LvsQty	% Complete
2017-01-31 10:27:44	BABA_YHOO	2		OM01-1485846002-SPRAGENT-35877	Canceled	YHOO	Sell S...	100				
2017-01-31 10:27:44	BABA_YHOO	1	✓	OM01-1485846002-SPRAGENT-35857	Complete	BABA	Buy	100	100	101.3000		100 %
2017-01-31 10:27:44	BABA_YHOO	2		OM01-1485846002-SPRAGENT-35855	Canceled	YHOO	Sell S...	200				
2017-01-31 10:27:09	BABA_YHOO	2		OM01-1485846002-SPRAGENT-35842	Canceled	YHOO	Sell S...	100				



Key features

1. **Spread Calc:** Controls the direction of the spread calculation (e.g., for Ratio, Regular is Sell/Buy, while Reverse is Buy/Sell)
2. **Strategy Type:** Ratio (Security/Security); Risk Arbitrage (Security/Security); Pct Spread (Security/Benchmark)
3. **Spread Ratio:** Ratio used in spread calculation (note: order quantities governed by Hedge Ratio)
4. **Cash:** Stub value applied to the spread calculation
5. **Advanced Parameters:** Click to expand
6. **Initiate:** Specifies the leg that will be initiated first (note that both legs can be set to initiate, which can result in accelerated liquidity capture)
7. **Destination:** Choose the broker route to which the child orders will be routed
8. **Limit Price:** Optionally, specify child order limit prices
9. **Tranche Quantity:** The maximum quantity of shares or value that Spread Trader will send for a leg at one time
10. **Create:** Creates, but doesn't enable; **Create & Enable:** creates and enables
11. **Action:** Spread Side (Setup, Unwind or both)
12. **Spread ID:** Symbol name used by default but can be changed
13. **Hedge Type:** Specifies whether the hedge should be based on quantity (share for share) or notional (value)
14. **Hedge Ratio:** Determines relative size of the child orders (e.g., trade one share of AAPL for every one share of MSFT)
15. **FX Parameters:** Choose currency or rate type or apply a static rate
16. **Spread Limit:** The target spread differential (price or percentage) sought
17. **Outside Limit:** Sets an outside threshold (i.e., stop); once reached, trading is suspended
18. **Notional:** Enter notional value; quantity will be automatically calculated

Spread calculation equations (prices based on "Strategy" selection located on Spread Trader's Advanced Tab)

Price differential

$$[(Leg2Price \times Leg2SpreadRatio) + Cash] - (Leg1Price \times Leg1SpreadRatio)$$

Reverse ratio

$$\left(\frac{Leg1SpreadRatio \times Leg1Price}{Leg2SpreadRatio \times Leg2Price + Cash} \right) \times 100$$

Ratio quote

$$\left(\frac{(Leg2SpreadRatio \times Leg2Price) + Cash}{Leg1SpreadRatio \times Leg1Price} \right) \times 100$$

Ratio day change

$$\left[\left(\frac{Leg2SpreadRatio \times Leg2Price}{Leg2PrevClose} \right) + Cash - \left(\frac{Leg1SpreadRatio \times Leg1Price}{Leg1PrevClose} \right) \right] \times 100$$

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