December 2020

Target Spread 8.7+

Quick Reference Guide

Target Spread | Overview

Target Spread and Advanced Target Spread are methods for applying spread on a conditional basis. As incoming quotes from Makers and Liquidity Providers stream into the Hub, the resulting per-layer market spreads are examined. Based on each layer's market spread and its relation to one or both configured thresholds (see below), the quote prices can be adjusted to have one of the following applied:

- Configured Target Spread
- Target spread that is the result of a scaled equation
- Normal core spread

Target Spread

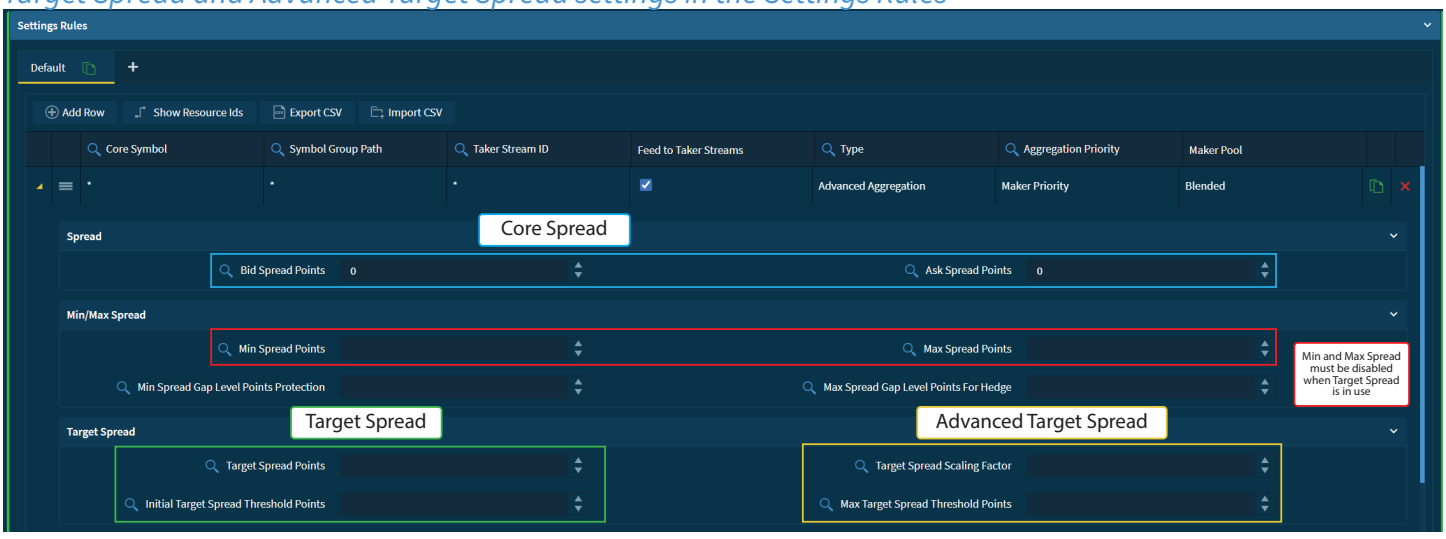
Target Spread allows you to specify an **Initial Target Spread Threshold** and a **Target Spread**. Quotes stream into the Hub, and if a layer has a market spread less than or equal to the threshold, the quote prices for that layer are adjusted to the configured Target Spread before going out to Takers. As such, orders placed against quotes that have the Target Spread applied are filled at matched price.

Advanced Target Spread

Advanced Target spread adds a greater degree of control to the existing Target Spread settings by introducing a **Max Target Spread Threshold** and a **Target Spread Scaling Factor**. If a layer has a market spread greater than the Initial Target Spread Threshold and less than the Max Target Spread Threshold, the Hub applies a calculation to adjust the quote prices for that layer based on its current market spread and the scaling factor.

Target Spreads allow you to offer better prices, at any layer of depth in the quote book, to your clients!

Target Spread and Advanced Target Spread settings in the Settings Rules



How does Target Spread work?

Let's calculate quotes with just Target Spread applied using the following settings. Here, if the market spread for the Taker Stream is less than or equal to 10, the Hub adjusts the outgoing price to maintain a consistent spread of 2. If the spread is 11 or over, the Hub takes the quote, adds in the configured core spread, and adjusts the outgoing price.

Core Symbol	Symbol Group	Bid Spread	Ask Spread	Target Spread	Initial Target Spread Threshold	Type	Maker Pool

As illustrated in the tables below, the first three layers of the market quotes have a spread less than or equal to 10; therefore, the outgoing prices are adjusted to have a consistent spread of 2. The last layer, however, exceeds the Initial Target Spread Threshold of 10 and has the configured core spread applied to the outgoing price.

Market Quotes

Bid Volume	Bid	Symbol	Spread	Layer	Ask	Ask Volume
250,000	0.65030	AUD/USD	1.0	0	0.65031	250,000
500,000	0.65029	AUD/USD	4.0	1	0.65033	500,000
1,000,000	0.65027	AUD/USD	10.0	2	0.65037	1,000,000
5,000,000	0.65025	AUD/USD	13.0	3	0.65038	5,000,000

>> Market Spread < Initial Target Spread Threshold
>> Target spread to be applied to the quotes

>> Market Spread > Initial Target Spread Threshold
>> Core Spread to be applied to the quote

Outgoing Quotes

Bid Volume	Bid	Symbol	Spread	Layer	Ask	Ask Volume
250,000	0.65030	AUD/USD	2.0	0	0.65032	250,000
500,000	0.65030	AUD/USD	2.0	1	0.65032	500,000
1,000,000	0.65031	AUD/USD	2.0	2	0.65033	1,000,000
5,000,000	0.65020	AUD/USD	23.0	3	0.65043	5,000,000

>> Add Target Spread to midpoint rate

>> Core Spread (-5/5) added to quotes

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How does Advanced Target Spread work?

Let's calculate quotes with Advanced Target Spread applied using the following settings:

Core Symbol	Symbol Group	Bid Spread	Ask Spread	Target Spread Points	Initial Target Spread Threshold Points	Max Target Spread Threshold Points	Target Spread Scaling Factor	Type	Maker Pool
*	G10	-3	3	2	10	14	12	Failover	MPool-1

With both the **Initial Target Spread Threshold** and **Max Target Spread Threshold** configured, there are three spread possibilities:

- If the market spread is less than or equal to 10, the Hub adjusts the outgoing price to maintain a consistent spread of 2.
- If the market spread is greater than 10, and less than or equal to 14, then Advanced Target Spread calculations are used to apply a spread.
- If the market spread is greater than 14, normal core spread is applied.

Market Quotes

Bid Volume	Bid	Symbol	Spread	Layer	Ask	Ask Volume
250,000	0.65027	AUD/USD	6.0	0	0.65033	250,000
500,000	0.65024	AUD/USD	11.0	1	0.65035	500,000
1,000,000	0.65023	AUD/USD	14.0	2	0.65037	1,000,000
5,000,000	0.65020	AUD/USD	19.0	3	0.65039	5,000,000

Market Spread < Initial Threhold
Target spread to be applied to the quote

Initial Threshold < Market Spread < Max Threshold
Advanced Target Spread to be applied to the quote

Initial Threshold < Market Spread < Max Threshold
Advanced Target Spread to be applied to the quote

Initial Threshold < Market Spread < Max Threshold
Core Spread to be applied to the quote

Outgoing Quotes

Bid vVolume	Bid	Symbol	Spread	Layer	Ask	Ask Volume
250,000	0.65029	AUD/USD	2.0	0	0.65031	250,000
500,000	0.65023	AUD/USD	14.0	1	0.65037	500,000
1,000,000	0.65020	AUD/USD	20.0	2	0.65040	1,000,000
5,000,000	0.65017	AUD/USD	25.0	3	0.65042	5,000,000

Add Target Spread to midpoint rate

Advanced Target Spread result (14) is added to midpoint rate

Advanced Target Spread result (50) is greater than Max Target Spread Threshold
Core Spread is added to quotes

Core Spread is added to quotes

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How does Advanced Target Spread work? (con't)

Let's work through the layers in the tables on the last page.

- **Layer 1** — We can see that the first layer of market quotes has a spread less than 10, so the outgoing price is adjusted to have a spread of 2.
- **Layers 2** and **3** — These layers have spreads greater than 10 and less than or equal to 14, so Advanced Target Spread logic is applied. To calculate the spread for these layers, the Hub subtracts the Initial Target Spread Theshold from the Market Spread, multiplies the result by the Scaling Factor, and then adds the Target Spread.
  - For **Layer 2**, the calculation is ((11-10)*12)+2, and the result is 14. Since this is less than or equal to the Max Target Spread Threshold, it is applied as the spread. -7 and 7 are added to the midpoint rate of Layer 2.
  - For **Layer 3**, the calculation is ((14-10)*12) +2, which equals 50. This value is greater than the Max Target Spread Threshold, so the core spread (-3, 3) is applied to the quotes.
- **Layer 4** — This layer has a spread greater than 14, so the core spread is applied to the quotes.