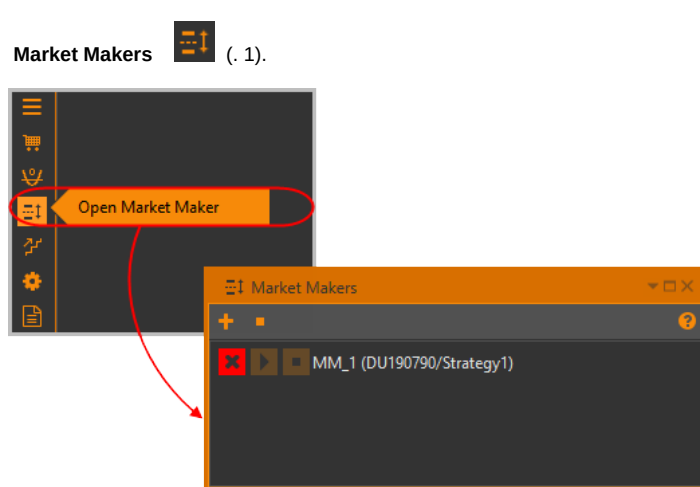


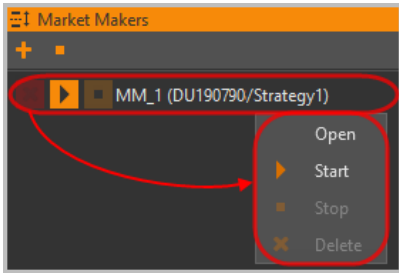
- $()$:

•	•		•
•	-	•	•
•		•	•

Market Makers  (. 1).

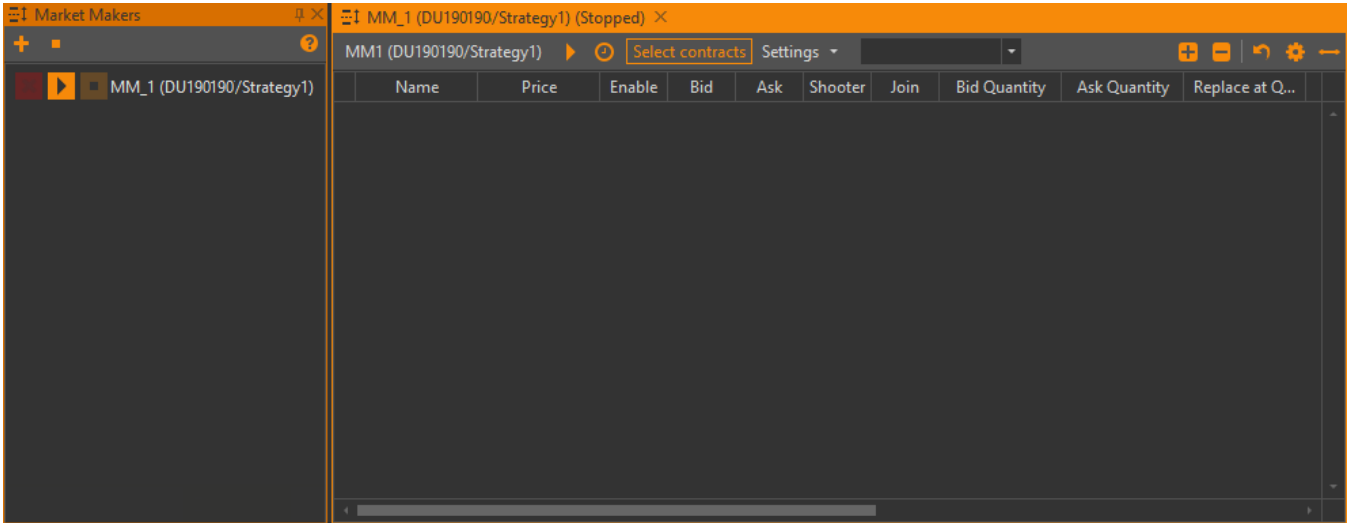


1 – Market Makers
(. 2).



2 –

, , **Open.** .

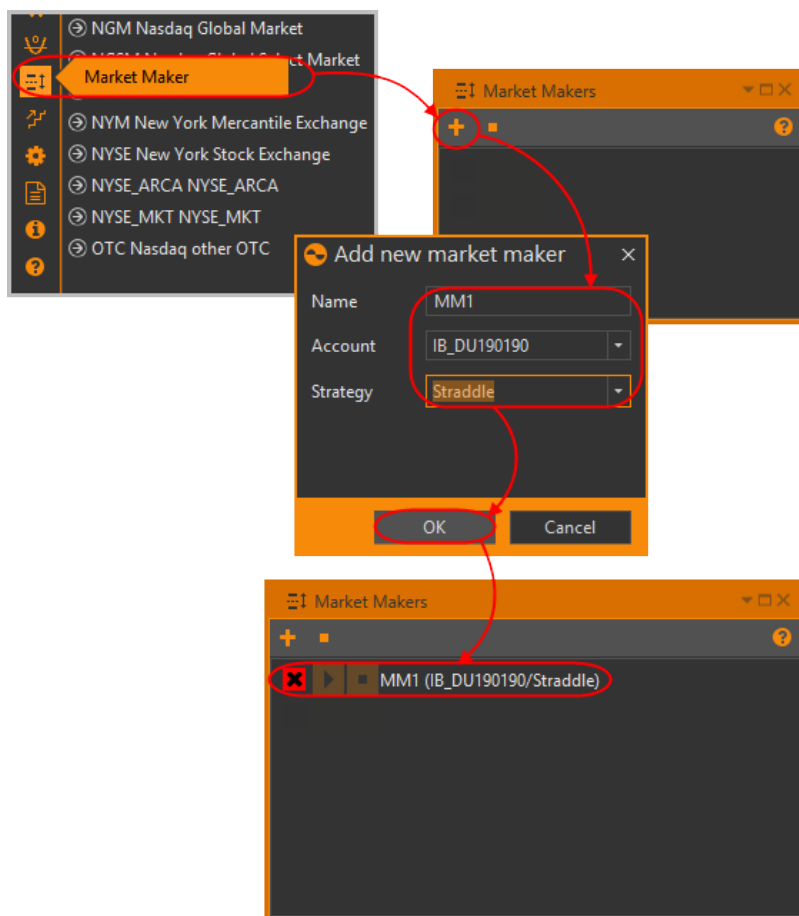


3 –

, , .

-

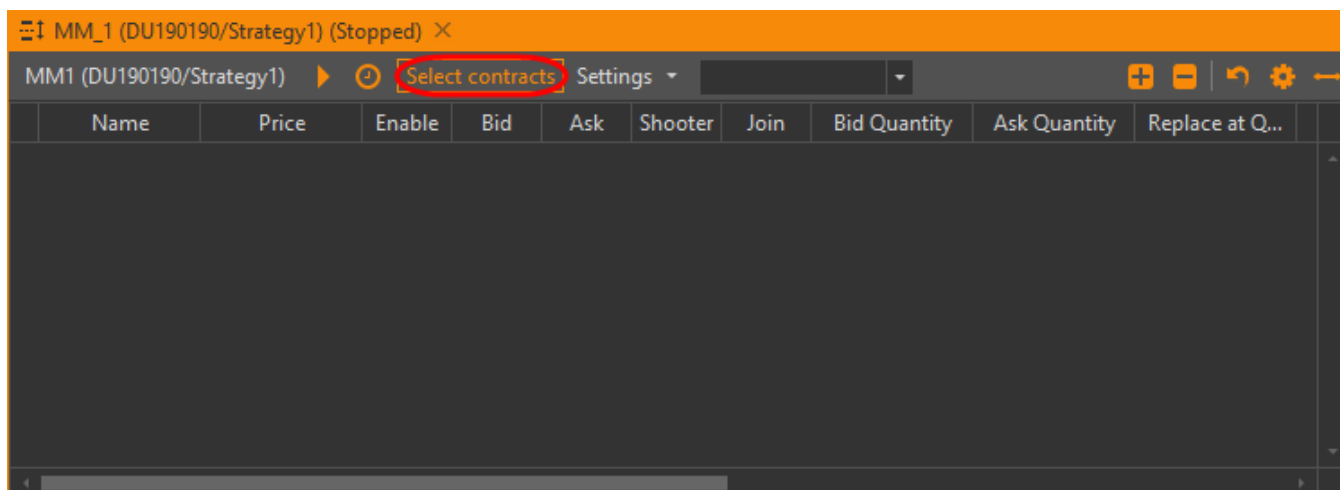
, .



4 –

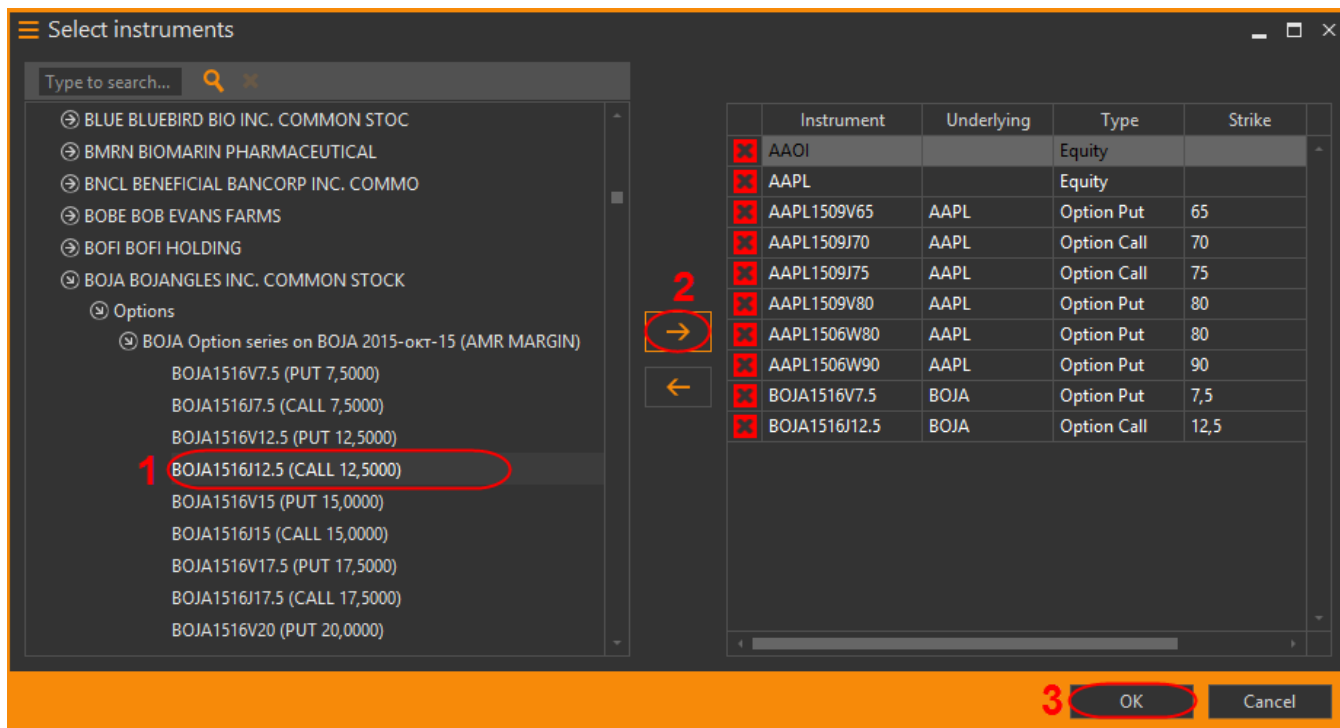


- /
-
- Select contracts.



5 –

(. 6[1]),  (. 6[2]), (. 6[3]), . , .



Select instruments

Type to search...  

- BLUE BLUEBIRD BIO INC. COMMON STOC
- BMRN BIOMARIN PHARMACEUTICAL
- BNCL BENEFICIAL BANCORP INC. COMMO
- BOBE BOB EVANS FARMS
- BOFI BOFI HOLDING
- BOJA BOJANGLES INC. COMMON STOCK
 - Options
 - BOJA Option series on BOJA 2015-oct-15 (AMR MARGIN)
 - BOJA1516V7.5 (PUT 7,5000)
 - BOJA1516J7.5 (CALL 7,5000)
 - BOJA1516V12.5 (PUT 12,5000)
 - BOJA1516J12.5 (CALL 12,5000)**
 - BOJA1516V15 (PUT 15,0000)
 - BOJA1516J15 (CALL 15,0000)
 - BOJA1516V17.5 (PUT 17,5000)
 - BOJA1516J17.5 (CALL 17,5000)
 - BOJA1516V20 (PUT 20,0000)

Instrument	Underlying	Type	Strike
AAOI		Equity	
AAPL		Equity	
AAPL1509V65	AAPL	Option Put	65
AAPL1509J70	AAPL	Option Call	70
AAPL1509J75	AAPL	Option Call	75
AAPL1509V80	AAPL	Option Put	80
AAPL1506W80	AAPL	Option Put	80
AAPL1506W90	AAPL	Option Put	90
BOJA1516V7.5	BOJA	Option Put	7,5
BOJA1516J12.5	BOJA	Option Call	12,5

OK **Cancel**

6 –

MM1 (DU190790/Strategy1) (Stopped) 

MM1 (DU190790/Strategy1)   **Select contracts** Settings 

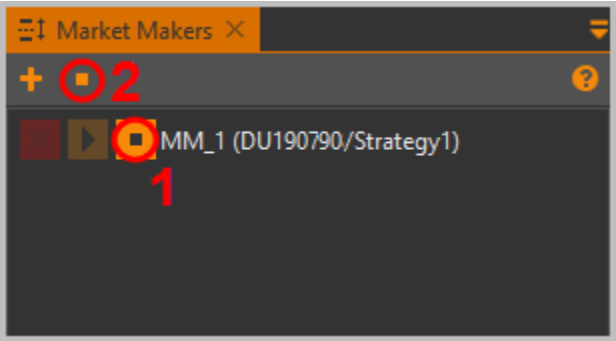
Name	Price	Enable	Bid	Ask	Shooter	Join	Bid Quan...	Ask Qua...	Replace...	Lower Li...	Upper Li...	Bid Spread	Ask Spread	Sensitivity	Shift per...	Curr. Pos.
AAPL	0.0000						0	0	0	0	0	0p	0p	0p	0p	7
AAPL150...	0.0000						0	0	0	0	0	0p	0p	0p	0p	0
AAPL150...	0.0000						0	0	0	0	0	0p	0p	0p	0p	0
AAPL150...	0.0000						0	0	0	0	0	0p	0p	0p	0p	0
AAPL150...	0.0000						0	0	0	0	0	0p	0p	0p	0p	0
AAPL150...	0.0000						0	0	0	0	0	0p	0p	0p	0p	0
AAPL150...	0.0000						0	0	0	0	0	0p	0p	0p	0p	0
BOJA151...	0.0000						0	0	0	0	0	0p	0p	0p	0p	0
BOJA151...	0.0000						0	0	0	0	0	0p	0p	0p	0p	0

7 –

PUT, – CALL, – . (. -).

/ , **Open** :

- :  Start/Stop;
- :   (. 8 [1]) **Market Makers.**  (. 8 [2]).



8 –

, (. 7). ,  Market Makers.

-

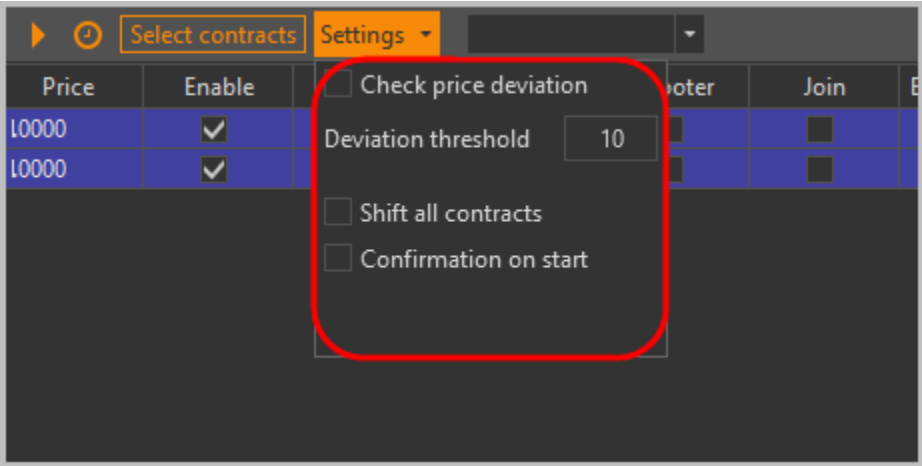
, . , (. 1).

1 –

Name	
Price	
Enable	, , . Bid / Ask
Bid	
Ask	
Shooter	
Join	
Bid Quantity	. : • (, 1 5); • (, 1d 2.5d). , ()
Ask Quantity	. Bid Quantity
Replace at Quantity	,
Lower Limit	. . "" . : • - = 100, • = 120, • = 30. (100), 20
Upper Limit	. . "" . , • - = 100, • = 80, • = 30. (100), 20

Bid Spread	bid . . : • (, 100p 100); • (, 2v); • (, 10%); • "". (.)
Ask Spread	ask . . Bid Spread , , , "" (.)
Sensitivity	. : • (, 100p 100); • (, 2v). , • = 4000, • = 10. 10 (<3990 >4010),
Shift per contract	- . . : • (, 100p 100); • (, 2v). , 5, , : + 5*3.
Curr. Pos.	T

Settings . , Apply changes.



9 –

2 –

Check price deviation	- . Deviation threshold,
Deviation threshold	-
Shift all contracts	Shift per contract
Confirmation on start	



MM1 (DU190790/Strategy1) (Running) X																	
MM1 (DU190790/Strategy1) [Select contracts] Settings																	
Na...	Price	Enable	Bid	Ask	Shooter	Join	Bid Q...	Ask Q...	Repla...	Lower...	Upper...	Bid Sp...	Ask S...	Sensiti...	Shift p...	Curr...	
AAPL...	40.7800	✓	✓	✓	■	✓	10	10	5	-50	50	100p	0p	20p	5p		
My market	40,78	50		Best ask		449,8		Accumulated shift		0p		Cur. joint level		0			
Bid	-59,22	0		Market		40,525	0,003052					Max. joint level		0			
				Best bid		38,85	0,003052										
AAPL...	35.7800	✓	✓	✓	■	■	10	10	7	-50	50	100p	0p	20p	5p		
AAPL...	0.2132	✓	■	✓	■	■	10	10	0	-50	50	2v	0p	20p	5p		
AAPL...	0.0000	✓	✓	✓	■	■	10	10	10	-50	50	150p	0p	20p	5p		
AAPL...	0.5303	✓	✓	✓	■	■	10	10	3	-50	50	3v	0p	20p	5p		

10 –



:

1. bid ask, - ;
2. ;
3. **Accumulated shift** (, Shift per contract);
4. , :
 - **Cur. joint level** – ;
 - **Max. joint level** – ;
 - **Cur. upper limit** – bid, ;
 - **Cur. lower limit** – ask, .

11 , call – put .

MM1 (DU190790/Strategy1) (Running) X																	
MM1 (DU190790/Strategy1) [Select contracts] Settings																	
Na...	Price	Enable	Bid	Ask	Shooter	Join	Bid Q...	Ask Q...	Repla...	Lower...	Upper...	Bid Sp...	Ask S...	Sensiti...	Shift p...	Curr...	
AAPL...	40.7800	✓	✓	✓	■	■	10	10	5	-50	50	100p	0p	20p	5p		
AAPL...	35.7800	✓	✓	✓	■	■	10	10	7	-50	50	100p	0p	20p	5p		
AAPL...	0.2132	✓	■	✓	■	■	10	10	0	-50	50	2v	0p	20p	5p		
AAPL...	0.0000	✓	✓	✓	■	■	10	10	10	-50	50	150p	0p	20p	5p		
AAPL...	0.5303	✓	✓	✓	■	■	10	10	3	-50	50	3v	0p	20p	5p		

11 –

:

1. ask (. 3). sk, **AskQuantity**;

3 –

Spread	Ask	Bid	
--------	-----	-----	--

	$P_{ask} = T + AskSpread + Curr.pos * Shift \text{ per ontract}$	$P_{bid} = T - BidSpread + Curr.Pos * Shift \text{ per ontract}$	• $T -$; • $Ask/BidSpread - (+/ -)$; • $Curr. Pos - (+/ -)$; • $Shift \text{ per ontract} - -$
	$P_{ask/bid} = P_{teor} + Curr.pos * Shift \text{ per ontract}$		• $P_{teor} - Ask / BidSpread (+/ -)$; • $Curr. Pos - (+/ -)$; • $Shift \text{ per ontract} - -$
	$P_{ask} = T + AskSpread * T / 100\% + Curr.pos * Shift \text{ per ontract}$	$P_{bid} = T - BidSpread * T / 100\% + Curr.pos * Shift \text{ per ontract}$	• $-$; • $Ask/BidSpread - \% (+/ -)$ • $Curr. Pos - (+/ -)$; • $Shift \text{ per ontract} - -$

2. bid (.3). bid, BidQuantity;
3. , , ;
4. , :
 - a. Sensitivity;
 - b. Replace at Quantity;
5. .


 (,), . Enable .

:

- (Shooter);
- (Join).

. . Shooter. :

1. ask bid (.) ;
2. P_{ask} Best bid, ask.
Best bid AskQuantity;
3. P_{bid} Best ask, bid.
Best ask BidQuantity;
4. , ;
5. , 2 / 3.


 / , .
 , .

-

. , .


 , 100 put 100 call. . . :

- put call ;
- Upper limit=100;
- Quantity=5.

Join.

MM1 (DU190790/Strategy1) (Running) X																	
MM1 (DU190790/Strategy1) [Select contracts] Settings																	
Na...	Price	Enable	Bid	Ask	Shooter	Join	Bid Q...	Ask Q...	Repla...	Lower...	Upper...	Bid Sp...	Ask S...	Sensiti...	Shift p...	Curr...	
AAPL...	40.7800	✓	✓	✓	✓	✓	10	10	5	-50	50	100p	0p	20p	5p		
AAPL...	35.7800	✓	✓	✓	✓	✓	10	10	7	-50	50	100p	0p	20p	5p		
AAPL...	0.2132	✓	✓	✓	✓	✓	10	10	0	-50	50	2v	0p	20p	5p		
AAPL...	0.0000	✓	✓	✓	✓	✓	10	10	10	-50	50	150p	0p	20p	5p		
AAPL...	0.5303	✓	✓	✓	✓	✓	10	10	3	-50	50	3v	0p	20p	5p		

12 –

:

1. Cur. joint level – .

$L_i = \text{Curr. Pos}/\text{Quantity}, :$

- Curr. Pos – (+/-);
- Quantity – bid ask.

(. 4).

4 – Cur. joint level

	Bid	Ask
Current position 0	+	-
Current position < 0	-	+


, Quantity=5, Curr. pos.=20, Bid, Cur. joint level=4.

2. Max. joint level;

$L_{\max} = \max(L_i)$

3. Bid/Ask Quantity, :

- (Current joint level) (Max joint level);
- (Current joint level).

Lower limit, Upper limit.

, – Cur. upper limit bid, Cur. lower limit ask. , , .

.

, .

, , -. Pricing model. . Option desk .

MM (CQGDemoITG158/Straddle) 2 Select contracts Settings 							
Contract	Price	Enable	Bid	Ask	Shooter	Jo	Pricing Model Option Desk ES M17 (exp 2017-Jun-16) AMR/MARGIN
☒ CME ES FC M...	111.26	☒	☒	☒	☒	☒	Pricing Model Option Desk ES U16 (exp 2016-Sep-16) AMR/MARGIN
Ask			Best ask	112,25	16,29		Accumulated shift
My market			Market	111,375	16,17		
Bid			Best bid	110,5	16,05		
☒ CME ES FC U...	185.84	☒	☒	☒	☒	☒	
Ask	185,75	199,9	Best ask	20,25	19,34		Accumulated shift
My market	185,842	200	Market	19,75	18,79		Upper limit is reached
Bid	185,75	199,9	Best bid	19,25	18,25		Lower limit is reached
☒ CME ES FC U...	179.03	☒	☒	☒	☒	☒	
Ask	179	200	Best ask	11,5	17,47		Accumulated shift
My market	179,025	200	Market	11,25	17,18		Upper limit is reached
Bid	179	200	Best bid	11	16,9		Lower limit is reached

13 –

-   - / ;
-  - ;
-  - ;
-  - , / ,