

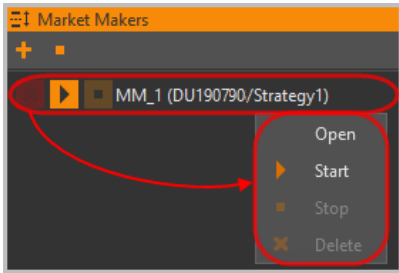
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 833. 834. 835. 836. 837. 838. 839. 840.

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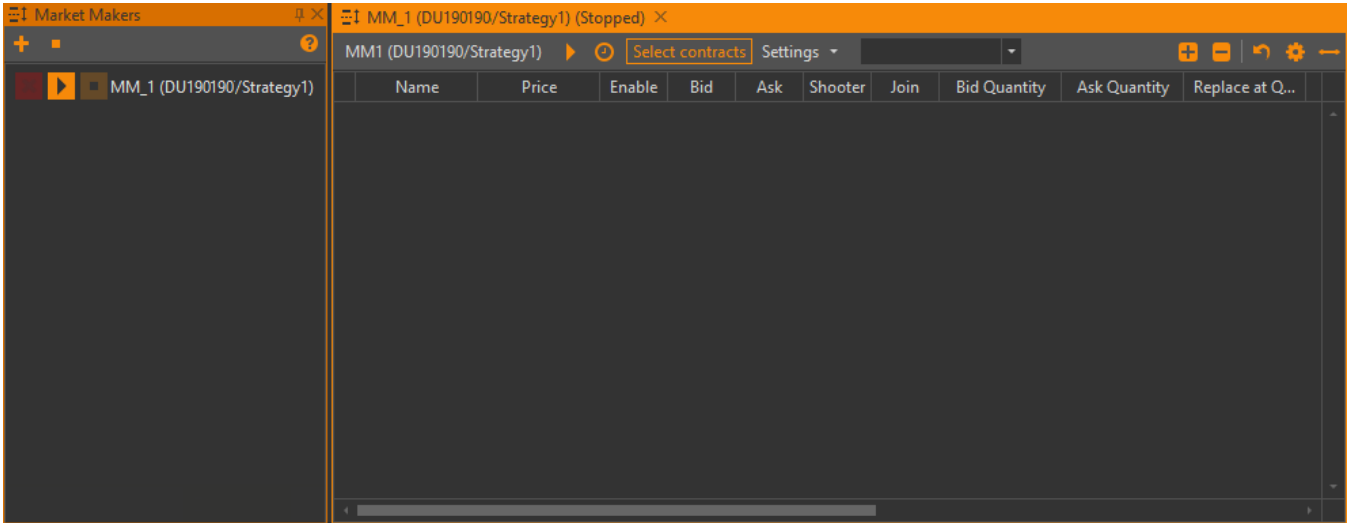
1

(



2 –

, , **Open.** .

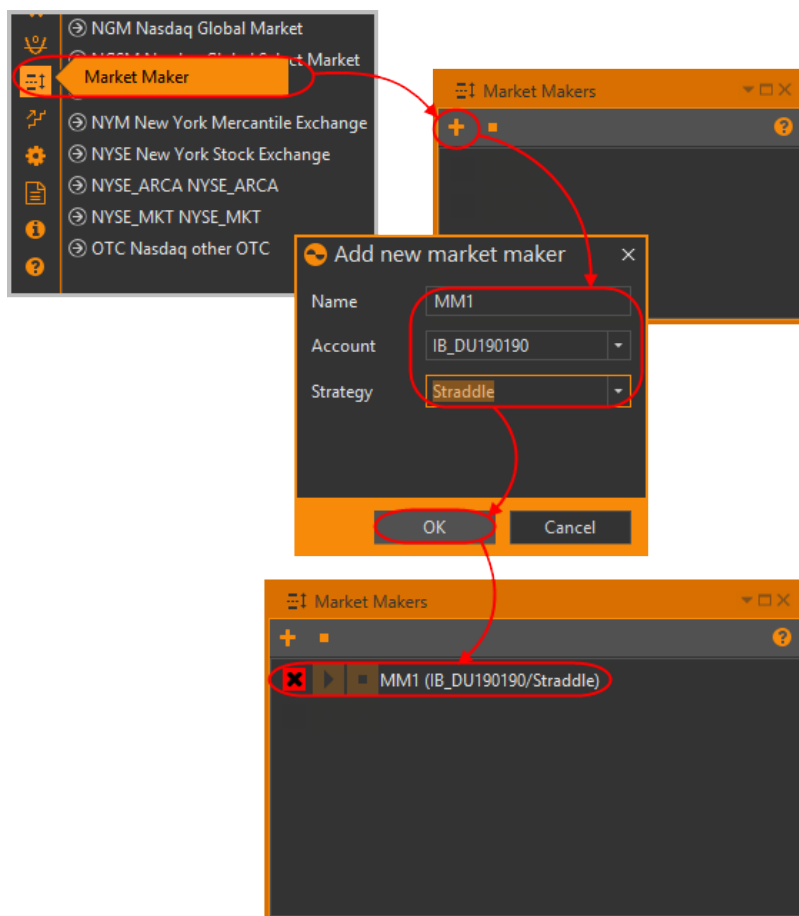


3 –

, , .

-

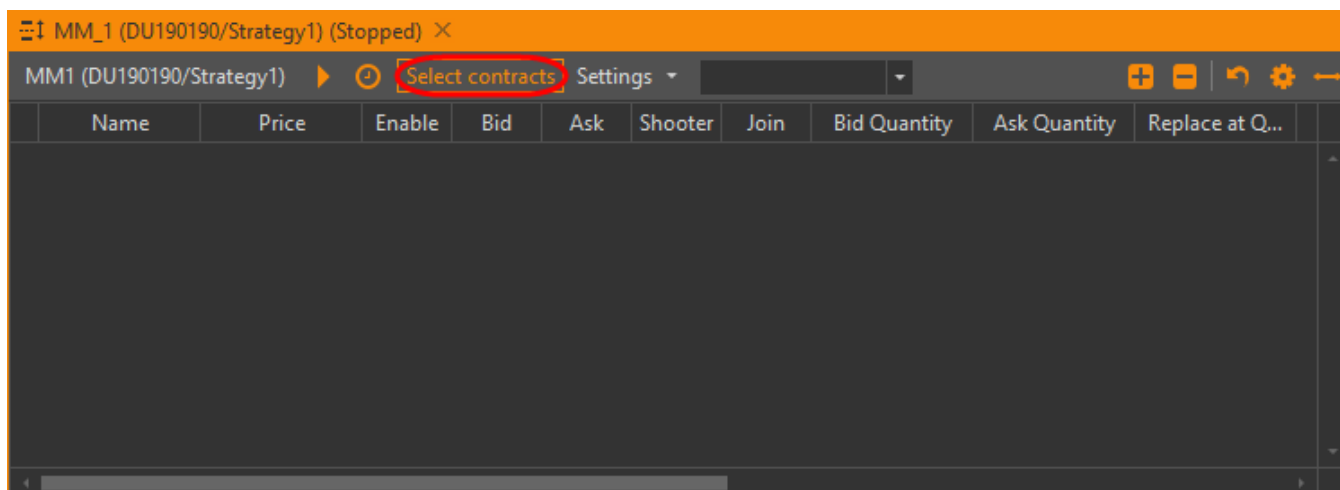
, .



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)

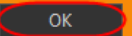
BOJA1516J17.5 (CALL 17,5000)

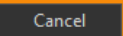
BOJA1516V20 (PUT 20,0000)

2 



| | 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 |

3 



6 –

MM1 (DU190790/Strategy1) (Stopped) 

MM1 (DU190790/Strategy1)    Select contracts Settings 

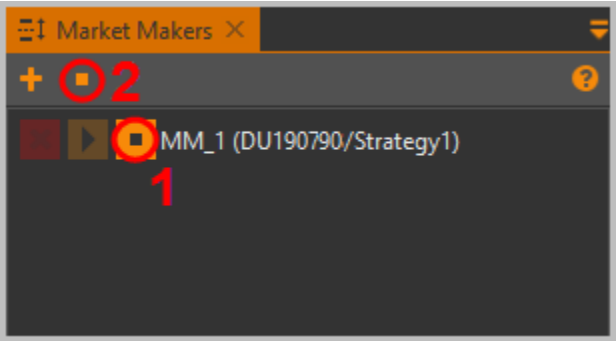
| Name | Price | Enable | Bid | Ask | Shooter | Join | Bid Quan... | Ask Qua... | Replace... | Lower Li... | Upper Li... | Bid Spread | Ask Spread | Sensitivity | Shift per... | Curr. Pos. |
|--|--------|---|---|---|---|---|-------------|------------|------------|-------------|-------------|------------|------------|-------------|--------------|------------|
|  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, :

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



8 –

, (. 7). ,  Market Makers.

-

, . . , (. 1).

1 –

| | |
|---------------------|--|
| | |
| Name | |
| Price | |
| Enable | , , . Bid / Ask |
| Bid | |
| Ask | |
| Shooter | |
| Join | |
| Bid Quantity | . : <ul style="list-style-type: none">• (, 1 5);• (, 1d 2.5d). , () |
| Ask Quantity | . Bid Quantity |
| Replace at Quantity | , |
| Lower Limit | . . "" . : <ul style="list-style-type: none">• - = 100,• = 120,• = 30. (100), 20 |
| Upper Limit | . . "" . , <ul style="list-style-type: none">• - = 100,• = 80,• = 30. (100), 20 |



| MM_1 (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 .

| MM_1 (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 | |
|--------|-----|-----|--|
|--------|-----|-----|--|

| | | | |
|--|--|--|--|
| | $P_{ask} = T + AskSpread + Curr.pos * Shift \text{ per ontract}$ | $P_{bid} = T - BidSpread + Curr.Pos * Shift \text{ per ontract}$ | <ul style="list-style-type: none"> • $T -$; • $Ask/BidSpread - (+/ -)$; • $Curr. Pos - (+/ -)$; • $Shift \text{ per ontract} - -$ |
| | $P_{ask/bid} = P_{teor} + Curr.pos * Shift \text{ per ontract}$ | | <ul style="list-style-type: none"> • $P_{teor} - Ask / BidSpread (+/ -)$; • $Curr. Pos - (+/ -)$; • $Shift \text{ per ontract} - -$ |
| | $P_{ask} = T + AskSpread * T / 100\% + Curr.pos * Shift \text{ per ontract}$ | $P_{bid} = T - BidSpread * T / 100\% + Curr.pos * Shift \text{ per ontract}$ | <ul style="list-style-type: none"> • $-$; • $Ask/BidSpread - \% (+/ -)$ • $Curr. Pos - (+/ -)$; • $Shift \text{ per ontract} - -$ |

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.

| 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 – .

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

- 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, :
 a. (Current joint level) (Max joint level);
 b. (Current joint level).
 Lower limit, Upper limit.

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

•

;

| | | | | | | |
|---|---|---|-----------------------|-----------|--------------------|---|
| • | , | - | Pricing model. | <u> </u> | Option desk | • |
|---|---|---|-----------------------|-----------|--------------------|---|

| MM (CQGDemoITG158/Straddle) 2 Select contracts Settings | | | | | | | |
|--|---------|--------|----------|---------|---------|----|---|
| Contract | Price | Enable | Bid | Ask | Shooter | Jo | |
| ☐ CME ES FC M... | 111.26 | ■ | ■ | ■ | ■ | ■ | Pricing Model Option Desk ES M17 (exp 2017-Jun-16) AMR/MARGIN |
| | | | | | | | 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 –

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