

Rinkos duomenys

raudys.com/kursas

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Vilnius 2018

Charakteristikos

- Realaus laiko, užlaikyti ar istoriniai
- Laiko periodas (diena, minute, valanda)
- Sudarymo būdas
- Atvaizdavimo būdai
- Duomenų vieneto komponentai (OHLCV)

Laiko periodas

- Mėnesiniai, savaitiniai, dieniniai, valandiniai, minutiniai, tikiniai
- Paremti laiko periodu kurį jie dengia
- Agreguoti duomenys sudaryti iš:
atidarymo, aukščiausia, žemiausia, uždarymo
kaina, bei tūrio
- Tikiniai duomenys atspindi sandorį ir yra tik
kaina bei kiekis kontraktų/akcijų

@ES(D) - 1 min CME L=1132.50 -19.75 -1.71% B=1132.50 A=1132.75 O=1136.00 Hi=1145.00 Lo=1128.50 V=182,533



1,132.50

SPY - Daily ARCX L=114.60 -1.32 -1.14% B=114.52 A=114.60 O=0.00 Hi=0.00 Lo=0.00 V=27,084



SPY(D) - Monthly ARCX L=151.75 0.79 0.52% B=151.67 A=151.76 O=151.22 Hi=151.89 Lo=151.22 V=103,133,681



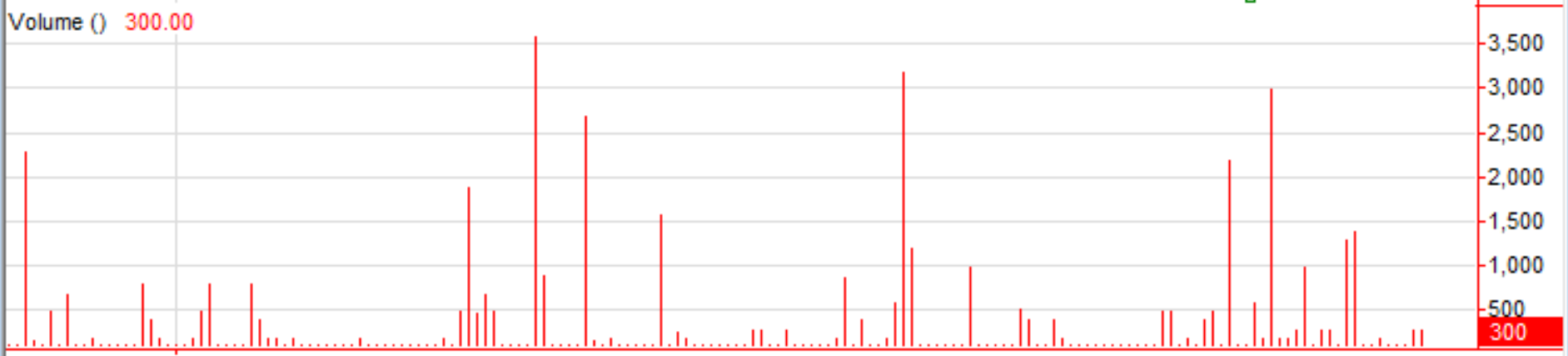
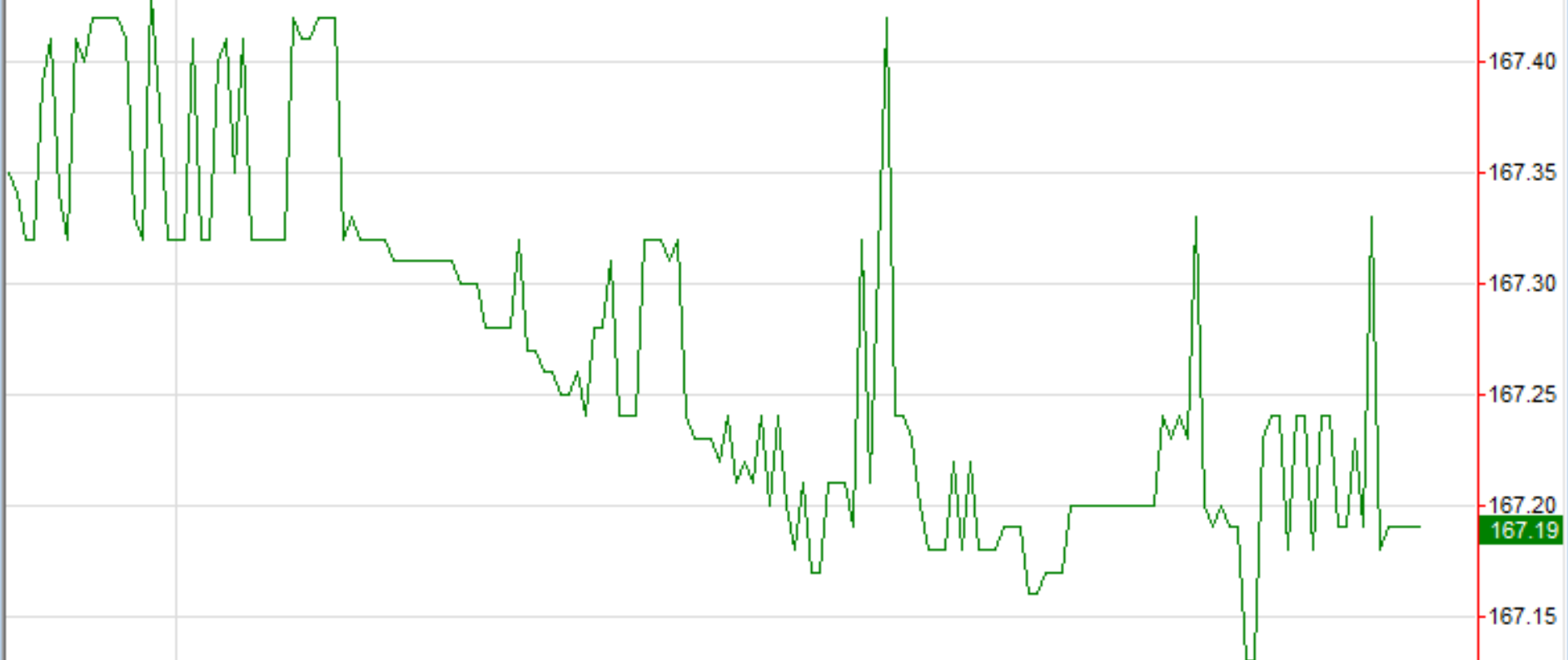
SPY - 1 min ARCX L=114.60 -1.32 -1.14% B=114.55 A=114.74 O=0.00 Hi=0.00 Lo=0.00 V=28,384





Time	Open	High	Low	Close	Vol	OI	Volume
07/29/2011 17:15	1619.50	1637.50	1613.00	1631.20	153054	373680	153054
08/01/2011 17:15	1631.20	1634.50	1608.20	1621.70	156244	379272	156244
08/02/2011 17:15	1622.60	1664.50	1618.80	1644.50	173572	385002	173572
08/03/2011 17:15	1662.50	1675.90	1654.40	1666.30	204437	383241	204437
08/04/2011 17:15	1662.90	1684.90	1642.20	1659.00	310247	378571	310247
08/05/2011 17:15	1649.70	1673.00	1644.20	1651.80	218360	373525	218360
08/08/2011 17:15	1681.70	1723.40	1681.70	1713.20	278274	370091	278274
08/09/2011 17:15	1719.90	1782.50	1717.70	1743.00	398589	361579	398589
08/10/2011 17:15	1747.40	1801.00	1740.20	1784.30	296968	369957	296968
08/11/2011 17:15	1798.00	1817.60	1734.50	1751.50	347101	366701	347101
08/12/2011 17:15	1767.50	1770.90	1725.80	1742.60	210578	363293	210578
08/15/2011 17:15	1747.10	1769.30	1730.80	1758.00	127711	360671	127711
08/16/2011 17:15	1768.50	1790.00	1763.60	1785.00	168060	362738	168060
08/17/2011 17:15	1788.50	1797.60	1781.60	1793.80	137235	363524	137235
08/18/2011 17:15	1792.20	1832.00	1786.80	1822.00	223989	368836	223989
08/19/2011 17:15	1827.10	1881.40	1824.50	1852.20	281310	366758	281310
08/22/2011 17:15	1862.90	1904.00	1858.00	1891.90	253907	369460	253907
08/23/2011 17:15	1900.20	1917.90	1826.00	1861.30	366699	364026	366699
08/24/2011 17:15	1831.50	1856.80	1751.60	1757.30	440826	356424	440826
08/25/2011 17:15	1753.00	1777.50	1705.40	1763.20	384694	340628	384694
08/26/2011 17:15	1776.40	1832.50	1759.50	1797.30	265243	335693	265243
08/29/2011 17:15	1840.00	1841.50	1778.10	1791.60	186016	332638	186016
08/30/2011 17:15	1791.30	1845.10	1786.20	1829.80	184591	340477	184591
08/31/2011 17:15	1837.60	1842.70	1813.60	1831.70	165623	335783	165623
09/01/2011 17:15	1831.70	1833.60	1815.50	1829.10	138082	336575	138082
09/02/2011 17:15	1827.90	1887.40	1826.90	1876.90	180277	345902	180277
09/05/2011 17:15							
09/06/2011 17:15	1906.00	1923.70	1861.80	1873.30	414591	352851	414591
09/07/2011 17:15	1876.00	1883.20	1793.80	1817.60	316257	345479	316257
09/08/2011 17:15	1819.50	1873.30	1816.20	1857.50	218499	342426	218499
09/09/2011 17:15	1871.90	1889.10	1825.50	1859.50	273998	346032	273998
09/12/2011 17:15	1862.20	1865.20	1804.00	1813.30	226772	344222	226772
09/13/2011 17:15	1816.80	1847.50	1794.80	1830.10	186087	338916	186087
09/14/2011 17:15	1837.30	1848.20	1811.50	1826.50	172648	339452	172648

IBM - 1 Tick Bar NYSE L=167.25 3.82 2.34% B=167.00 A=167.46 O=164.01 Hi=169.66 Lo=161.99 V=6,981,043



15:59



Time	Open	High	Low	Close	Up	Down	Volume
09/15/2011 2:54	1815.00	1815.00	1815.00	1815.00	0	1	1.00
09/15/2011 2:54	1815.00	1815.00	1815.00	1815.00	0	1	1.00
09/15/2011 2:54	1815.00	1815.00	1815.00	1815.00	0	1	1.00
09/15/2011 2:54	1815.10	1815.10	1815.10	1815.10	2	0	2.00
09/15/2011 2:54	1815.00	1815.00	1815.00	1815.00	0	2	2.00
09/15/2011 2:54	1815.20	1815.20	1815.20	1815.20	1	0	1.00
09/15/2011 2:54	1815.00	1815.00	1815.00	1815.00	0	1	1.00
09/15/2011 2:54	1815.00	1815.00	1815.00	1815.00	0	1	1.00
09/15/2011 2:54	1815.00	1815.00	1815.00	1815.00	0	2	2.00
09/15/2011 2:54	1815.00	1815.00	1815.00	1815.00	0	1	1.00
09/15/2011 2:54	1814.80	1814.80	1814.80	1814.80	0	1	1.00
09/15/2011 2:54	1814.80	1814.80	1814.80	1814.80	0	1	1.00
09/15/2011 2:54	1814.70	1814.70	1814.70	1814.70	0	2	2.00
09/15/2011 2:54	1814.70	1814.70	1814.70	1814.70	0	1	1.00
09/15/2011 2:54	1814.60	1814.60	1814.60	1814.60	0	1	1.00
09/15/2011 2:54	1814.70	1814.70	1814.70	1814.70	1	0	1.00
09/15/2011 2:54	1814.70	1814.70	1814.70	1814.70	1	0	1.00
09/15/2011 2:54	1814.70	1814.70	1814.70	1814.70	1	0	1.00
09/15/2011 2:54	1814.60	1814.60	1814.60	1814.60	0	1	1.00
09/15/2011 2:54	1814.60	1814.60	1814.60	1814.60	0	1	1.00
09/15/2011 2:54	1814.90	1814.90	1814.90	1814.90	1	0	1.00
09/15/2011 2:54	1814.70	1814.70	1814.70	1814.70	0	1	1.00
09/15/2011 2:54	1814.70	1814.70	1814.70	1814.70	0	1	1.00
09/15/2011 2:54	1814.70	1814.70	1814.70	1814.70	0	1	1.00
09/15/2011 2:54	1814.50	1814.50	1814.50	1814.50	0	1	1.00
09/15/2011 2:54	1814.50	1814.50	1814.50	1814.50	0	1	1.00
09/15/2011 2:54	1814.50	1814.50	1814.50	1814.50	0	1	1.00
09/15/2011 2:54	1814.60	1814.60	1814.60	1814.60	1	0	1.00
09/15/2011 2:54	1815.00	1815.00	1815.00	1815.00	1	0	1.00
09/15/2011 2:54	1815.00	1815.00	1815.00	1815.00	1	0	1.00
09/15/2011 2:54	1815.00	1815.00	1815.00	1815.00	1	0	1.00
09/15/2011 2:54	1815.00	1815.00	1815.00	1815.00	1	0	1.00
09/15/2011 2:54	1815.00	1815.00	1815.00	1815.00	1	0	1.00

Agregavimas pagal apyvartą

- Dažniausiai barai sudaromi pagal laiką
 - 1 min, 60 min, 1 dienos
 - Barai gali turėti skirtingą apyvartą
- Galima agreguoti ir pagal apyvartą
 - 1000 akcijų baras
 - Tuomet skiriasi kiekvieno baro laikas

AAPL - 1000 Tick Bar NASDAQ L=373.50 -3.98 -1.05% B=371.44 A=374.04 O=0.00 Hi=0.00 Lo=0.00 V=300





Time	Open	High	Low	Close	Up	Down	Volume
09/14/2011 12:55	165.10	165.49	165.09	165.47	76780	64162	140942.00
09/14/2011 13:06	165.49	165.85	165.45	165.84	70295	67555	137850.00
09/14/2011 13:11	165.77	166.21	165.74	166.11	79402	61666	141068.00
09/14/2011 13:28	166.12	166.24	165.70	165.71	54624	80768	135392.00
09/14/2011 13:40	165.71	166.41	165.70	166.36	67531	73212	140743.00
09/14/2011 13:53	166.40	166.65	166.23	166.45	66637	72567	139204.00
09/14/2011 14:04	166.42	166.70	166.00	166.67	67058	71391	138449.00
09/14/2011 14:13	166.69	166.88	166.47	166.53	69381	77955	147336.00
09/14/2011 14:22	166.50	167.18	166.43	167.01	70099	73021	143120.00
09/14/2011 14:31	167.02	167.05	166.76	166.76	56113	82435	138548.00
09/14/2011 14:41	166.76	166.95	166.66	166.90	61753	57038	118791.00
09/14/2011 14:51	166.90	167.15	166.81	167.13	62803	68747	131550.00
09/14/2011 14:59	167.14	167.62	167.08	167.60	93599	48537	142136.00
09/14/2011 15:04	167.63	168.00	167.50	167.98	82548	58980	141528.00
09/14/2011 15:10	167.95	168.46	167.93	168.39	72545	60317	132862.00
09/14/2011 15:16	168.38	168.65	168.25	168.61	60057	72827	132884.00
09/14/2011 15:20	168.61	168.98	168.59	168.91	77867	61135	139002.00
09/14/2011 15:25	168.90	169.02	168.77	168.97	66375	67695	134070.00
09/14/2011 15:29	168.97	169.43	168.87	169.39	85942	65103	151045.00
09/14/2011 15:33	169.39	169.49	169.12	169.40	65287	70709	135996.00
09/14/2011 15:36	169.41	169.50	169.33	169.46	69259	61965	131224.00
09/14/2011 15:39	169.46	169.66	169.41	169.51	65166	81873	147039.00
09/14/2011 15:42	169.51	169.55	168.94	168.97	62659	71559	134218.00
09/14/2011 15:45	168.97	168.98	168.63	168.76	64935	70366	135301.00
09/14/2011 15:48	168.76	168.79	168.17	168.18	63605	64554	128159.00
09/14/2011 15:50	168.17	168.21	167.85	168.20	62863	59859	122722.00
09/14/2011 15:53	168.17	168.28	167.96	168.11	48928	70305	119233.00
09/14/2011 15:55	168.13	168.13	167.45	167.48	51163	75968	127131.00
09/14/2011 15:57	167.49	167.78	167.42	167.71	68499	66015	134514.00
09/14/2011 15:59	167.72	167.72	167.46	167.49	67131	87621	154752.00
09/14/2011 15:59	167.49	167.56	167.13	167.19	69104	137033	206137.00

Times & sales

- Atspidni rinkos elgesj
- Rodo kada kur įvyko koks sandoris
- Paprastai atspindi rinkos elgesj
- Informacija nėra agreguota



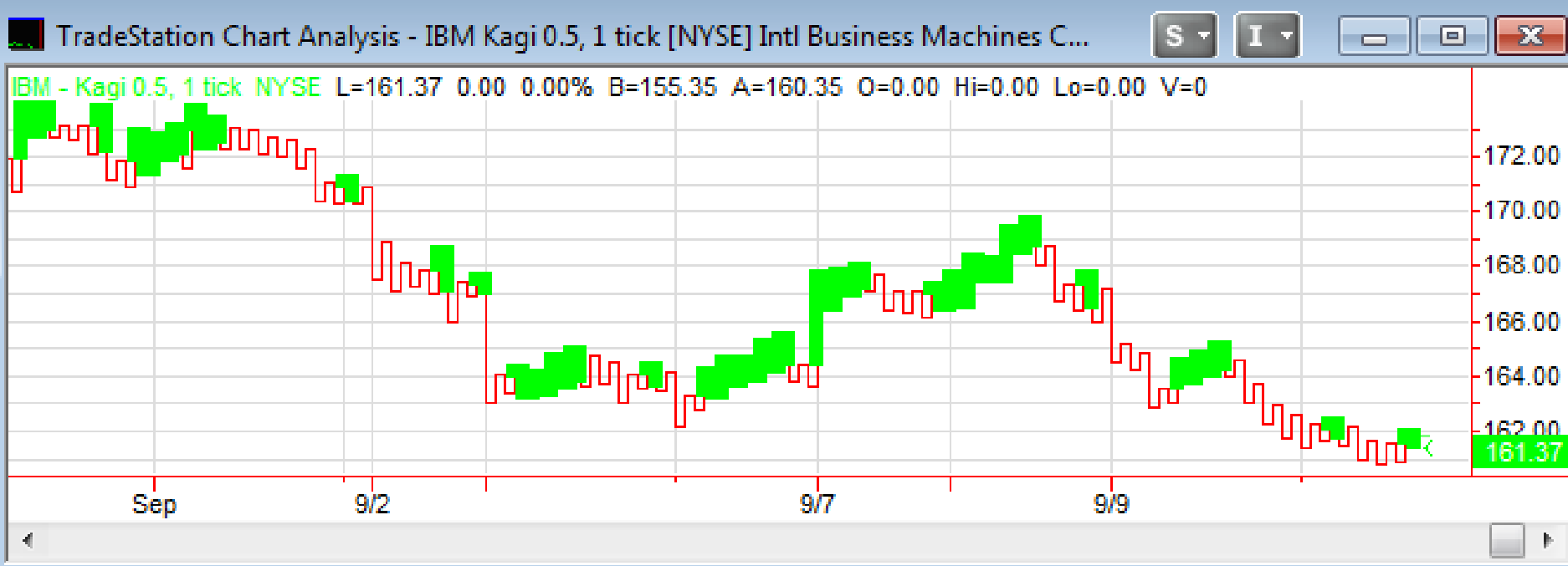
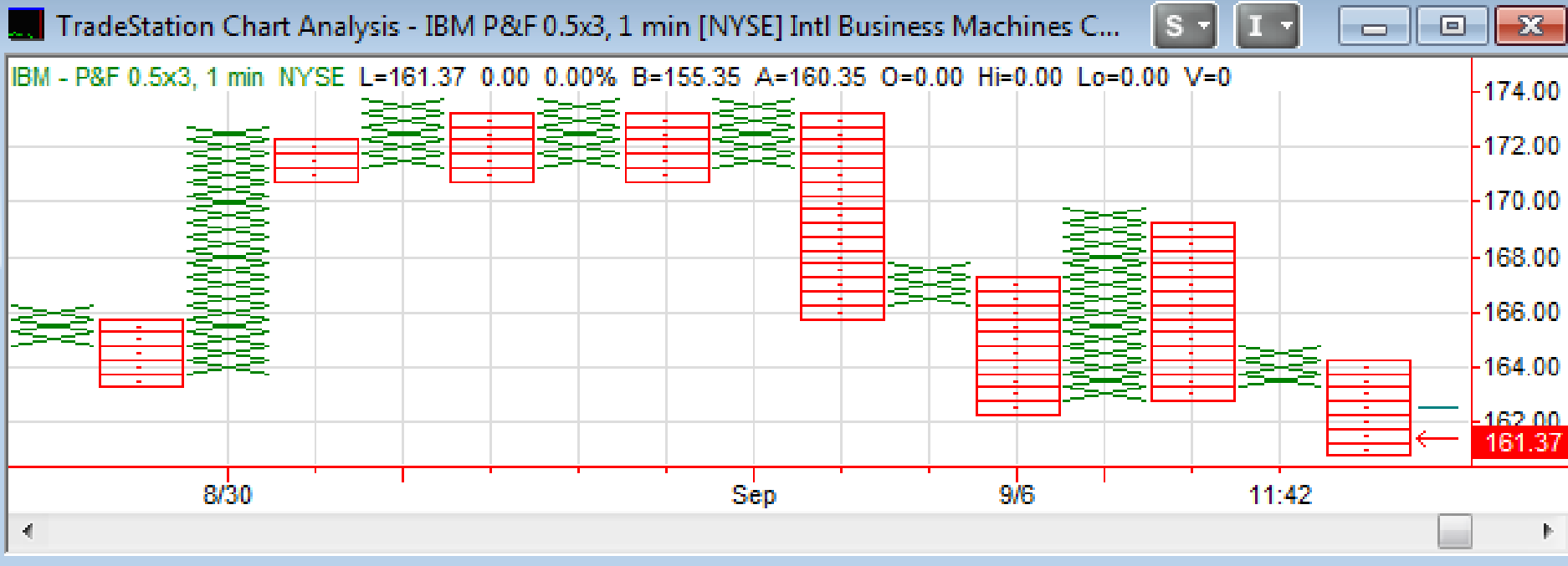
TradeStation Time & Sales - @W(D) [...]

Symbol	Bid Tick	Last	Net Chg	Bid	Ask	High	Low
@W(D)	↑	699 2/8	-5 2/8	699 4/8	700	705 6/8	698 4/8

Time	Type	Price	Size	Exch	Condition
11:55:38 AM	Trade	700 2/8	1	CBOT	At Bid
11:55:38 AM	Trade	700 2/8	1	CBOT	At Bid
11:55:38 AM	Trade	700 2/8	1	CBOT	At Bid
11:55:38 AM	Trade	700 2/8	1	CBOT	At Bid
11:54:34 AM	Trade	700 2/8	1	CBOT	At Bid
11:54:34 AM	Trade	700 2/8-	1	CBOT	At Bid
11:54:31 AM	Trade	700 4/8	1	CBOT	At Bid
11:54:31 AM	Trade	700 4/8-	1	CBOT	At Bid
11:53:45 AM	Trade	701+	1	CBOT	At Ask
11:52:01 AM	Trade	700 6/8-	1	CBOT	At Ask
11:49:36 AM	Trade	701	1	CBOT	Filtered from chart , Btw
11:49:12 AM	Trade	701	1	CBOT	At Bid
11:49:12 AM	Trade	701	1	CBOT	At Bid
11:45:46 AM	Trade	701	1	CBOT	At Bid
11:43:51 AM	Trade	701	1	CBOT	Below Bid
11:43:51 AM	Trade	701	1	CBOT	Below Bid
11:43:51 AM	Trade	701	2	CBOT	Below Bid
11:43:51 AM	Trade	701	1	CBOT	Below Bid
11:43:51 AM	Trade	701	1	CBOT	Below Bid
11:43:51 AM	Trade	701	1	CBOT	Below Bid
11:43:51 AM	Trade	701	1	CBOT	Below Bid
11:43:51 AM	Trade	701-	1	CBOT	Below Bid
11:43:51 AM	Trade	701 2/8	1	CBOT	At Bid
11:41:30 AM	Trade	701 2/8-	1	CBOT	At Bid
11:41:30 AM	Trade	702+	1	CBOT	At Ask
11:41:30 AM	Trade	701 6/8	1	CBOT	At Ask
11:37:49 AM	Trade	701 6/8	1	CBOT	At Ask
11:37:49 AM	Trade	701 6/8	2	CBOT	At Ask
11:37:49 AM	Trade	701 6/8+	1	CBOT	At Ask
11:37:35 AM	Trade	701 2/8-	1	CBOT	At Bid
11:36:47 AM	Trade	701 4/8	1	CBOT	At Bid
11:36:47 AM	Trade	701 4/8+	1	CBOT	At Bid
11:31:14 AM	Trade	701 2/8+	1	CBOT	Btwn B&A
11:31:03 AM	Trade	701+	1	CBOT	At Bid

Egzotiški atvaizdavimai

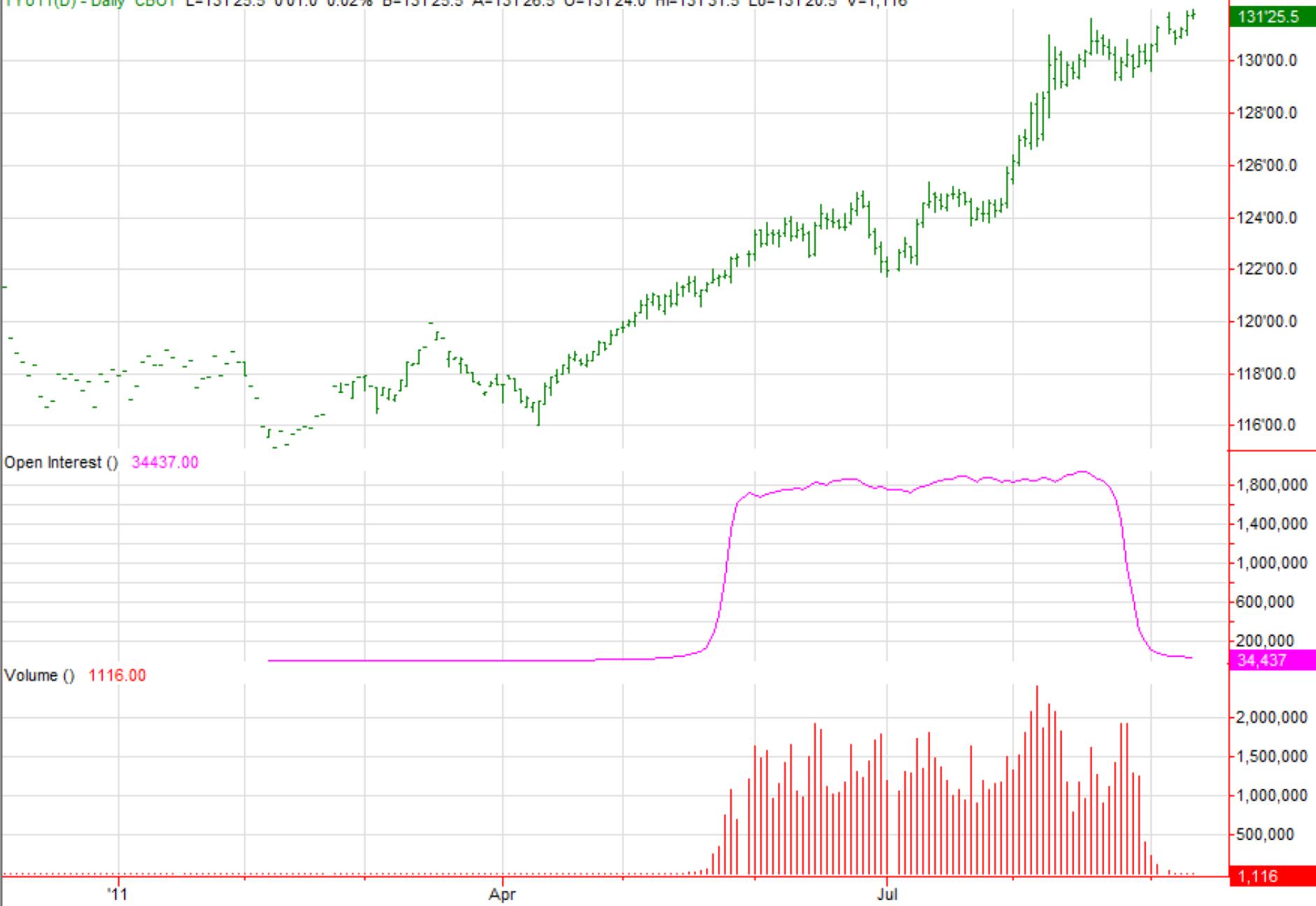
- Kagi
- Kase
- Line Break
- Momentum
- Point and Figure
- Range
- Renko



Komponentai

- OHLC arba OHLCV – Open, High, Low, Close, Volume
- Dar būna Open Interest – tik ateities sandoriuose
- Kiekis/apyvarta (Volume) neegzistuoja forexe (valiutų prekyboje)
 - Kai kurie brokeriai siunčia simuliuotą apyvartą
- Atspindi visą agreguotą laiko periodą
- Tikiniai duomenys atspindi sandorį

TYU11(D) - Daily CBOT L=131'25.5 O=131'24.0 0.02% B=131'25.5 A=131'26.5 O=131'24.0 Hi=131'31.5 Lo=131'20.5 V=1,116



131'25.5
 130'00.0
 128'00.0
 126'00.0
 124'00.0
 122'00.0
 120'00.0
 118'00.0
 116'00.0
 1,800,000
 1,400,000
 1,000,000
 600,000
 200,000
 34,437
 2,000,000
 1,500,000
 1,000,000
 500,000
 1,116

'11

Apr

Jul

Min kainos pasikeitimas

- Akcijos – centas (priklauso nuo kainos)
- Ateities sandoriai – tikas (kiekvienam skirtingas)
- Forex – pipsai, arba būna $\frac{1}{2}$ ar $\frac{1}{10}$ pipso pipso vertė apie 10 USD
- Verta žinoti
 - Minimalus kainos pasikeitimas gali keistis
 - Anksčiau buvo kitos

Pavyzdžiai

Format Symbol - @TY(D) 1440 min [CBOT] 10 Yr U.S.Treasury Notes C... X

Settings | Style | Scaling | Properties | Format Symbol - @TY(D) 1440 min [CBOT]

Symbol: @TY

Category: Future

Country: United States

Currency: USD

Session: Regular Session ...

Time Zone: Exchange

Price Scale: 1/32 and 1/4 of 32nd

Min Move: 1.000000

Big Point Value: 1000.000000

Expiration Date:

Notice Date:

Delivery Month:

Delivery Year:

OK Cancel Help

Format Symbol - @GC(D) 1440 min [COMEX] Gold Continuous Contrac... X

Settings | Style | Scaling | Properties

Symbol: @GC

Category: Future

Country: United States

Currency: USD

Session: Regular Session ...

Time Zone: Exchange

Price Scale: 1/100

Min Move: 10.000000

Big Point Value: 100.000000

Expiration Date:

Notice Date:

Delivery Month:

Delivery Year:

OK Cancel Help

Min kiekis

- Kartais yra ribojamas minimalus kiekis
- Akcijos prekiaujamos lotais (po 100 akcijų) nors galima ir mažiau (kai kuriose biržose)
- Valiutos prekiaujamos lotais (po 100K USD) galima ir mini-lotais (po 10K USD)
- Ateities sandoriai skiriasi vienas nuo kito
 - Stengiamasi kad būtų apie 100K USD nominalios vertės
 - Būna mini arba micro kontraktai (EC, E7, M6E)
<https://www.tradestation.com/pricing/futures-margin-requirements>

Nominali vertė

- Instrumento vieneto vertė valiuta
- Skiriasi nuo pinigų reikalingų atlikti sandorį
- Atspindi svertą (leverage)
- Pvz.: draudimas namo vertės 1 000 000 LT
 - Kainuoja 1000 litų
- Valiutų rinkoje, 100 000 EURUSD kontraktui prekiauti tereikia 2000 USD
- Ateities sandoris Mini S&P500 vertas ~130 000 USD
 - reikia ~6000 USD prekybai (svertas ~1:21)

Duomenų naujumas

- Realus laiko
 - Ateina tiesiai iš biržos arba kelių biržų
 - Kainuoja (pvz. CME 75USD per mėn.)
- Uždelsti
 - Uždelsta dažniausiai būna 15 minučių
 - Dažnai nieko nekainuoja arba simboliškai 1 USD
- Istoriniai
 - Senesni duomenys
 - Nuo 15 min iki 100 metų senumo
 - Brokeriai duoda nemokamai arba reikia pirkti

Rinkos duomenų sesija

- Tai laikas kurio metu agreguojama informacija
- Pagrindiniai 2 tipai
 - PIT sesija (nuo 9 iki 16 val.)
(Open outcry)
 - Pilna sesija (visą parą)
arba 24h sesija
- Pit ir pilnos sesijos skiriasi skirtingiems instrumentam



Pilna ir Dieninė sesija

Sessions

Session Settings

Use regular session(s)

Use custom session(s):
(Custom sessions not available when using Daily, Weekly or Monthly intervals)

Template Name: \$aistis

Create ... Modify ... Delete ...

Session Preview: Regular Session

	a	1	2	3	4	5	6	7	8	9	10	11	p	1	2	3	4	5	6	7	8	9	10	11		
Sun																										
Mon																										
Tue																										
Wed																										
Thu																										
Fri																										
Sat																										

Regular Session Outside Regular Session

#	Name	Start Day	Start Time	End Day	End Time	SEOC
1	Session 1	Sun	3:30 PM	Mon	3:15 PM	✓
2	Session 2	Mon	3:30 PM	Tue	3:15 PM	✓
3	Session 3	Tue	3:30 PM	Wed	3:15 PM	✓
4	Session 4	Wed	3:30 PM	Thu	3:15 PM	✓

Note: Session times are based on exchange time.

OK Cancel Help

Sessions

Session Settings

Use regular session(s)

Use custom session(s):
(Custom sessions not available when using Daily, Weekly or Monthly intervals)

Template Name: \$aistis

Create ... Modify ... Delete ...

Session Preview: Regular Session

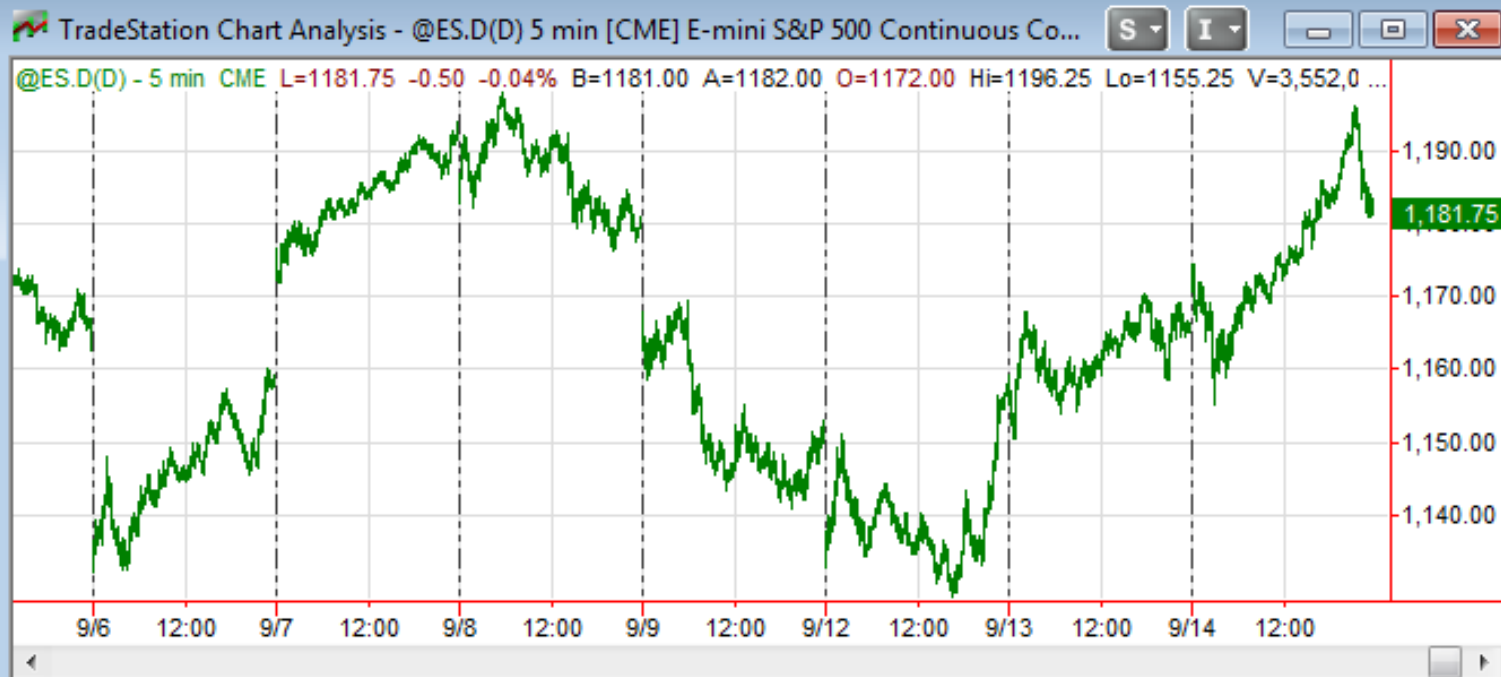
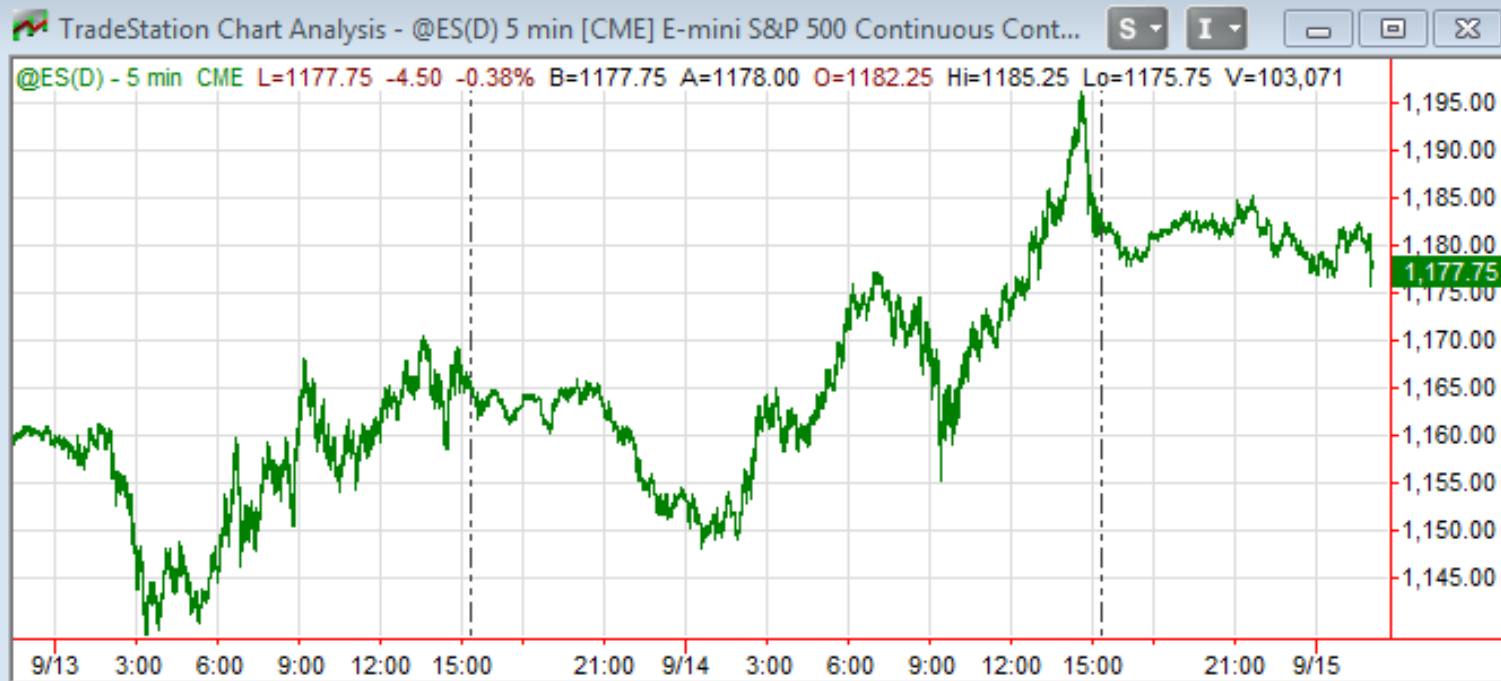
	a	1	2	3	4	5	6	7	8	9	10	11	p	1	2	3	4	5	6	7	8	9	10	11		
Sun																										
Mon																										
Tue																										
Wed																										
Thu																										
Fri																										
Sat																										

Regular Session Outside Regular Session

#	Name	Start Day	Start Time	End Day	End Time	SEOC
1	Session 1	Mon	8:30 AM	Mon	3:15 PM	✓
2	Session 2	Tue	8:30 AM	Tue	3:15 PM	✓
3	Session 3	Wed	8:30 AM	Wed	3:15 PM	✓
4	Session 4	Thu	8:30 AM	Thu	3:15 PM	✓

Note: Session times are based on exchange time.

OK Cancel Help



2 skirtingų inst. sesijos

Sessions [X]

Session Settings

Use regular session(s)

Use custom session(s):
(Custom sessions not available when using Daily, Weekly or Monthly intervals)

Template Name: \$aistis

Create ... Modify ... Delete ...

Session Preview: Regular Session

	a	1	2	3	4	5	6	7	8	9	10	11	p	1	2	3	4	5	6	7	8	9	10	11	
Sun																									
Mon																									
Tue																									
Wed																									
Thu																									
Fri																									
Sat																									

Regular Session
 Outside Regular Session

#	Name	Start Day	Start Time	End Day	End Time	SEOC
1	Session 1	Sun	3:30 PM	Mon	3:15 PM	✓
2	Session 2	Mon	3:30 PM	Tue	3:15 PM	✓
3	Session 3	Tue	3:30 PM	Wed	3:15 PM	✓
4	Session 4	Wed	3:30 PM	Thu	3:15 PM	✓
5	Session 5	Thu	3:30 PM	Fri	3:15 PM	✓

Note: Session times are based on exchange time.

OK Cancel Help

Sessions [X]

Session Settings

Use regular session(s)

Use custom session(s):
(Custom sessions not available when using Daily, Weekly or Monthly intervals)

Template Name: \$aistis

Create ... Modify ... Delete ...

Session Preview: Regular Session

	a	1	2	3	4	5	6	7	8	9	10	11	p	1	2	3	4	5	6	7	8	9	10	11	
Sun																									
Mon																									
Tue																									
Wed																									
Thu																									
Fri																									
Sat																									

Regular Session
 Outside Regular Session

#	Name	Start Day	Start Time	End Day	End Time	SEOC
1	Session 1	Sun	5:30 PM	Mon	4:00 PM	✓
2	Session 2	Mon	5:30 PM	Tue	4:00 PM	✓
3	Session 3	Tue	5:30 PM	Wed	4:00 PM	✓
4	Session 4	Wed	5:30 PM	Thu	4:00 PM	✓
5	Session 5	Thu	5:30 PM	Fri	4:00 PM	✓

Note: Session times are based on exchange time.

OK Cancel Help

Pre / Post Market

Sessions [X]

Session Settings

Use regular session(s)

Use custom session(s):
 (Custom sessions not available when using Daily, Weekly or Monthly intervals)

Template Name: \$aistis [v]

Create ... Modify ... Delete ...

Session Preview: Regular Session

Legend: Regular Session Outside Regular Session

#	Name	Start Day	Start Time	End Day	End Time	SEOC
1	Session 1	Mon	9:30 AM	Mon	4:00 PM	✓
2	Session 2	Tue	9:30 AM	Tue	4:00 PM	✓
3	Session 3	Wed	9:30 AM	Wed	4:00 PM	✓
4	Session 4	Thu	9:30 AM	Thu	4:00 PM	✓
5	Session 5	Fri	9:30 AM	Fri	4:00 PM	✓

Note: Session times are based on exchange time.

OK Cancel Help

Sessions [X]

Session Settings

Use regular session(s)

Use custom session(s):
 (Custom sessions not available when using Daily, Weekly or Monthly intervals)

Template Name: US Stock with Pre & Post Market [v]

Create ... Modify ... Delete ...

Session Preview: US Stock with Pre & Post Market

Legend: Regular Session Outside Regular Session

#	Name	Start Day	Start Time	End Day	End Time	SEOC
1	Pre-market	Mon	8:00 AM	Mon	9:30 AM	
2	Primary market	Mon	9:30 AM	Mon	4:00 PM	
3	Post-market	Mon	4:00 PM	Mon	8:00 PM	✓
4	Pre-market	Tue	8:00 AM	Tue	9:30 AM	
5	Primary market	Tue	9:30 AM	Tue	4:00 PM	

Note: Session times are based on exchange time.

OK Cancel Help

Valiutos – EURUSD

Egzotika

Sessions [X]

Session Settings

Use regular session(s)

Use custom session(s):
(Custom sessions not available when using Daily, Weekly or Monthly intervals)

Template Name: \$aistis

Create ... Modify ... Delete ...

Session Preview: Regular Session

Legend: Regular Session (solid green), Outside Regular Session (hatched green)

#	Name	Start Day	Start Time	End Day	End Time	SEOC
1	Session 1	Sun	5:00 PM	Mon	4:59 PM	✓
2	Session 2	Mon	5:00 PM	Tue	4:59 PM	✓
3	Session 3	Tue	5:00 PM	Wed	4:59 PM	✓
4	Session 4	Wed	5:00 PM	Thu	4:59 PM	✓
5	Session 5	Thu	5:00 PM	Fri	4:59 PM	✓

Note: Session times are based on exchange time.

OK Cancel Help

Sessions [X]

Session Settings

Use regular session(s)

Use custom session(s):
(Custom sessions not available when using Daily, Weekly or Monthly intervals)

Template Name: \$aistis

Create ... Modify ... Delete ...

Session Preview: Regular Session

Legend: Regular Session (solid green), Outside Regular Session (hatched green)

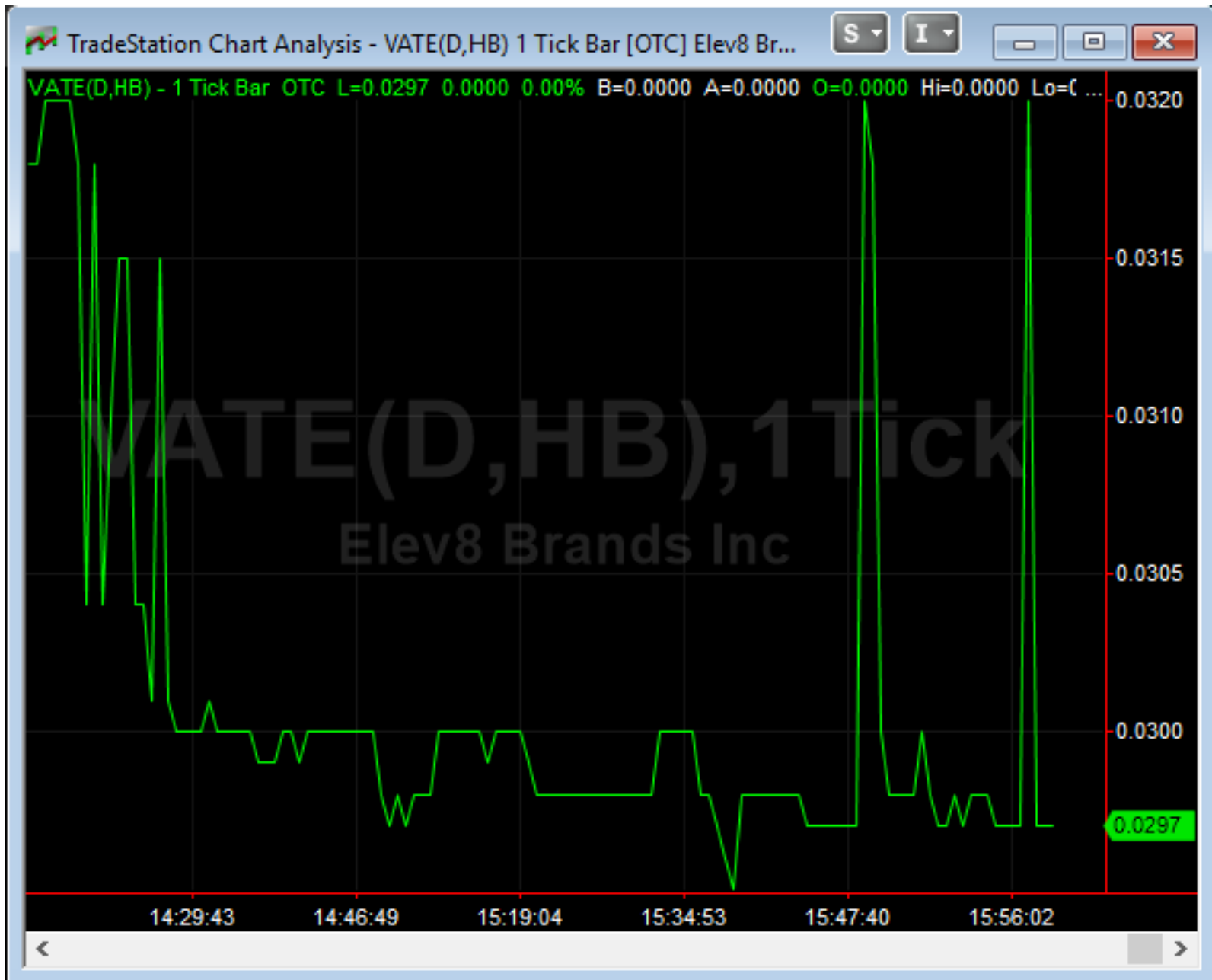
#	Name	Start Day	Start Time	End Day	End Time	SEOC
1	Session 1	Sun	6:00 PM	Mon	7:15 AM	
2	Session 2	Mon	9:30 AM	Mon	1:15 PM	✓
3	Session 3	Mon	6:00 PM	Tue	7:15 AM	
4	Session 4	Tue	9:30 AM	Tue	1:15 PM	✓
5	Session 5	Tue	6:00 PM	Wed	7:15 AM	

Note: Session times are based on exchange time.

OK Cancel Help

Duomenys keičiasi

- Duomenys keičiasi
- Nes kompanijos susijungia, nuperka viena kitą
- Duomenys baigiasi nes kompanijos bankrutuoja
- Atsiranda nauji, nes atsiranda naujos kompanijos
- Pakeičiamas min pasikeitimas (tikas)
- Nukrinta akcijos kaina žemiau 0,5 USD vertės



Realaus laiko duomenys

- Tikai (kaina ir dydis)
- Lygio 1 duomenys (Level 1)
 - Sandoriais, ir jų dydžiai, geriausia/blogiausia kaina ir pasiūlos/paklausos dydis
- Lygio 2 duomenys (Level 2)
 - Rinkos gylis
 - Kainuoja papildomai
- Lygio 3 duomenys (Level 3)
 - Duoda dar koki papildymą ([NASDAQ TotalView](#))

Symbol	Bid Tick	Last	Net Chg	Position	Open P/L	Quantity	Account No.
SO	↑	36.84	0.00	54	0.54	# 500	SIM595063M

Price	Depth	Size	Spread
36.83 * 36.85	1 * 1	2100 * 32000	0.02
36.58 * 37.10	1 * 1	400 * 100	0.52
36.00 * 37.14	2 * 2	200 * 200	1.14
35.73 * 37.91	1 * 1	2700 * 2700	2.18
0.01 * 2000.00	1 * 1	100 * 100	1999.99

ID	Bid	Size	Time	ID	Ask	Size	Time
NYSE	36.83	2100	09/02 11:30 PM	NYSE	36.85	32000	09/02 11:30 PM
Position	36.83	54		1-6191-05	36.98	54	09/02 11:00 PM
ARCX#	36.58	400	03:37:18 PM	ARCX#	37.10	100	03:30:29 PM
nsdq#	36.00	100	03:00:01 PM	NASDQ	37.14	100	03:00:03 PM
NASDQ	36.00	100	03:29:11 PM	nsdq#	37.14	100	03:00:03 PM
EDGX	35.73	2700	03:05:49 PM	EDGX	37.91	2700	03:05:50 PM
MSCO	0.01	100	02:30:02 PM	MSCO	2000.00	100	02:30:02 PM

<Queued> SIMULATED ACCT: Sell 13 GS @ 145.5400 Limit - Intelligent #1-6031-4418

Quantity: # 500 Limit Price: P Stop Price: Auto

Order Type: Limit Route: Intelligent Duration: Day+ Account No.: SIM595063M

Attach OSO Exit - Brk - 1L/1S Place OCO Order Entry - B/F Buy

10 poziciju duoda

TradeStation Market Depth - ESU10 [CME] - E-mini S&P 500 Sep 2010

Symbol	Bid Tick	Last	Net Chg	Position	Open P/L	Quantity	Account No.
ESU10	↑	1100.75	11.25	-3	-1687.50	1	21035297

Price	Depth	Size	Spread
1100.75 * 1101.00	1 * 1	115 * 797	0.25
1100.50 * 1101.25	1 * 1	555 * 924	0.75
1100.25 * 1101.50	1 * 1	928 * 1798	1.25
1100.00 * 1101.75	1 * 1	1199 * 1094	1.75
1099.75 * 1102.00	1 * 1	1087 * 1369	2.25
1099.50 * 1102.25	1 * 1	1252 * 1110	2.75
1099.25 * 1102.50	1 * 1	1073 * 1186	3.25
1099.00 * 1102.75	1 * 1	1325 * 1169	3.75
1098.75 * 1103.00	1 * 1	960 * 1538	4.25
1098.50 * 1103.25	1 * 1	1346 * 1155	4.75

ID	Bid	Size	Time	ID	Ask	Size	Time
CME	1100.75	115	07:40:49 AM	CME	1101.00	797	07:40:48 AM
CME	1100.50	555	07:40:48 AM	CME	1101.25	924	07:40:48 AM
CME	1100.25	928	07:40:48 AM	CME	1101.50	1798	07:40:48 AM
CME	1100.00	1199	07:40:48 AM	CME	1101.75	1094	07:40:48 AM
CME	1099.75	1087	07:40:48 AM	CME	1102.00	1369	07:40:48 AM
CME	1099.50	1252	07:40:48 AM	CME	1102.25	1110	07:40:47 AM
CME	1099.25	1073	07:40:48 AM	CME	1102.50	1186	07:40:47 AM
CME	1099.00	1325	07:40:48 AM	CME	1102.75	1169	07:40:48 AM
CME	1098.75	960	07:40:48 AM	CME	1103.00	1538	07:40:49 AM
CME	1098.50	1346	07:40:48 AM	CME	1103.25	1155	07:40:47 AM
Position	1089.50	3					
2-3635-05	1084.25	2	09/02 04:14 PM				

<Received> Sell 176 FNFG @ 11.7000 Limit - Intelligent #2-3619-2529

Buy	Sell	Quantity	Limit Price	Stop Price
		1	P	Auto
X Bids	Cancel All	X Ofrs	Order Type	Duration
Reverse	Close	Limit	Day	21035297
Attach OSO	Exit - Brk - 1L/1S	Place OCO Order	Entry - B/F Buy	

TradeStation Market Depth - IBM [NYSE] - Intl Business Mac...

Symbol	Bid Tick	Last	Net Chg	Position	Open P/L	Quantity	Account No.
IBM	129.23	1.24	0	0.00	# 500	SIM595063M	

Price	Depth	Size	Spread
129.21 * 129.23	5 * 1	2900 * 100	0.02
129.20 * 129.24	3 * 3	800 * 634	0.04
129.19 * 129.25	1 * 2	300 * 367	0.06

ID	Bid	Size	Time	ID	Ask	Size	Time
BATS	129.21	100	08:02:52 PM	BATS	129.23	100	08:02:40 PM
EDGA	129.21	500	08:02:57 PM	nsdq#(2)	129.24	234	08:01:53 PM
NASDQ	129.21	800	08:03:00 PM	NASDQ	129.24	200	08:02:57 PM
nsdq#(4)	129.21	800	08:03:00 PM	ARCX#	129.24	200	08:03:00 PM
NYSE	129.21	700	08:03:06 PM	nsdq#(3)	129.25	267	08:01:55 PM
EDGX	129.20	100	08:02:08 PM	NYSE	129.25	100	08:03:04 PM
TMBR	129.20	200	08:03:02 PM	nsdq#(5)	129.26	434	08:02:57 PM
ARCX#	129.20	500	08:03:04 PM	nsdq#(10)	129.27	1900	08:03:00 PM
nsdq#	129.19	300	08:03:06 PM	nsdq#(7)	129.29	700	08:02:58 PM
CINN#	129.18	100	08:01:09 PM	nsdq#(6)	129.30	700	08:02:58 PM
nsdq#(3)	129.18	300	08:02:57 PM	CINN#	129.30	700	08:03:03 PM
nsdq#	129.17	200	08:02:57 PM	EDGX	129.31	100	08:02:57 PM
nsdq#(6)	129.16	700	08:02:57 PM	nsdq#(5)	129.31	900	08:02:57 PM
nsdq#(4)	129.15	400	08:02:58 PM	nsdq#(2)	129.32	300	08:01:51 PM
nsdq#(11)	129.14	1300	08:03:05 PM	nsdq#(2)	129.33	400	08:02:12 PM
nsdq#(3)	129.13	300	08:01:51 PM	nsdq#(3)	129.34	1300	08:02:57 PM
nsdq#(3)	129.12	1700	08:02:53 PM	CBOE	129.35	100	08:02:49 PM
nsdq#(3)	129.11	300	08:01:50 PM	nsdq#(3)	129.35	500	08:03:02 PM
nsdq#(5)	129.10	500	08:02:55 PM	nsdq#(4)	129.36	400	08:02:56 PM
nsdq#(2)	129.09	200	08:01:52 PM	nsdq#(5)	129.37	700	08:01:51 PM
nsdq#(4)	129.08	400	08:02:57 PM	nsdq#(4)	129.38	500	08:02:56 PM
nsdq#(3)	129.07	300	08:01:25 PM	nsdq#(4)	129.39	400	08:02:57 PM
nsdq#	129.06	100	08:01:35 PM	nsdq#(4)	129.40	600	08:02:57 PM
nsdq#(2)	129.05	300	08:00:59 PM	nsdq#(3)	129.41	500	08:01:51 PM
nsdq#(3)	129.04	500	08:02:53 PM	nsdq#	129.42	100	08:01:51 PM
nsdq#(5)	129.03	600	08:00:59 PM	nsdq#(4)	129.44	400	08:03:04 PM
nsdq#	129.02	100	08:01:51 PM	nsdq#	129.46	18	08:02:18 PM
nsdq#(4)	129.01	400	08:02:09 PM	AUTO	130.00	100	06:33:35 PM
CBOE	128.97	100	08:02:49 PM	EDGA	130.06	100	08:02:35 PM

<Filled> SIMULATED ACCT: Sold 83 NVLS @ 24.2500 Limit - Filled @ 24.2500 - Intelligent #1-6290

Buy Sell Short Cover Quantity # 500 Limit Price Auto Stop Price Auto Order Type Limit Route Intelligent Day Account No. SIM595063M Attach OSD Exit - Brk - 1L/1S Place OCO Order Entry - B/F Buy

TradeStation Matrix - IBM [NYSE] - Intl Business Machines Corp

Symbol	Bid Tick	Last	Net Chg	Position	Open P/L	Quantity	Account No.
IBM	129.23	1.24	0	0.00	# 500	SIM595063M	

P/L (USD)	Orders	Bid ...	Price	Ask Size	Vol ...	Vol
			129.32	300		10511
			129.31	1000 (2)		14232
			129.30	1400 (2)		22708
			129.29	700		8340
			129.28			8529
			129.27	1900		4300
			129.26	434		9882
			129.25	367 (2)		26776
			129.24	634 (3)		16133
			100 129.23	100		26823
			129.22			15300
			2900 (5) 129.21			20925
			800 (3) 129.20			26686
			300 129.19			23149
			400 (2) 129.18			16207
			200 129.17			15857
			700 129.16			13117
			400 129.15			18616
			1300 129.14			25594
			300 129.13			10601
			1700 129.12			14357
			300 129.11			15176
			500 129.10			41248
			200 129.09			7425
			400 129.08			5961
			300 129.07			6650
			100 129.06			10047
			300 129.05			11527
			500 129.04			13935
			600 129.03			6709
			100 129.02			11400
			400 129.01			12700
			129.00			36517
			128.99			18244
			128.98			17750
			100 128.97			14435
			128.96			4300
			128.95			14072
			128.94			4000
			128.93			11673
			128.92			5259
			128.91			8200
			128.90			8781

<Filled> SIMULATED ACCT: Sold 83 NVLS @ 24.2500 Limit - Filled @ 24.

Order Settings Order Type Auto (LMT/STP) Account No. SIM595063M Quantity # 500 Duration Day Route Intelligent Attach OSD Exit - Brk - 1L/1S Place Order Buy Mkt Short Mkt Buy Trl Stp Short Trl Stp Pts Amt 0.05 Place OCO Order Entry - B/F Buy Manage Order(s)/Position X Bids Cancel All X Ofrs Reverse Close

Cancel All Clear Log Re-center Configure Hotkey Details

Default Size 1

Quote Panel

Contract	Last	Change	Bid	Ask	Position
YM Sep'11 @ECBOT	11041	-36	11039	11040	

Buttons

Close Position Reverse Position View Account Armed

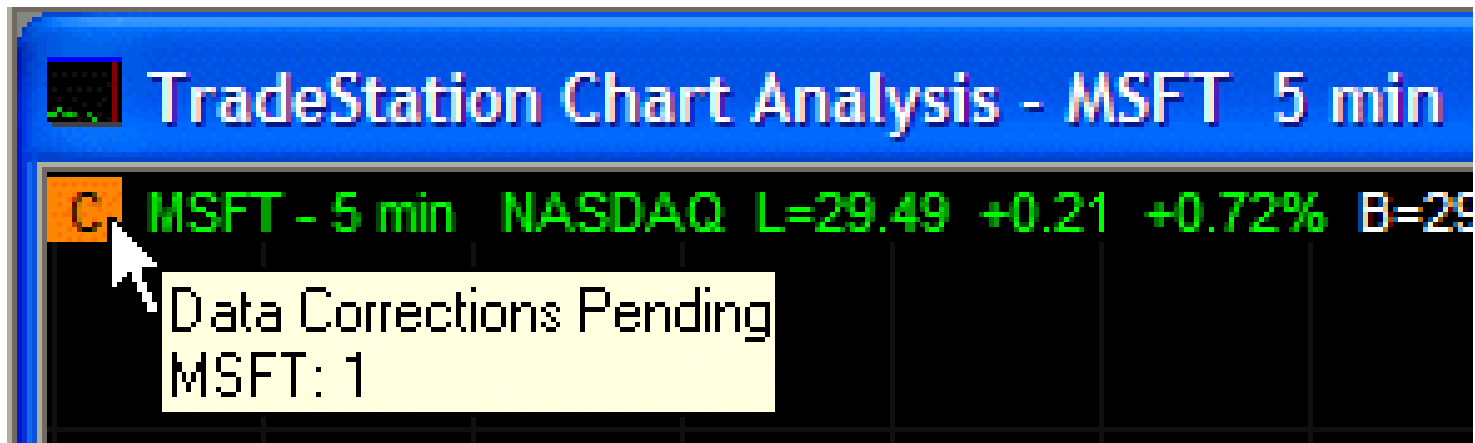
Orders Log Trades Portfolio

Action	Quantity	Type	Lmt Price	Aux. Price	Status
--------	----------	------	-----------	------------	--------

Status	Size	Bid Size	Price	Ask Size	Size	Status	P&L	Histogram
		1	11059	1				
			11058					
			11057					
			11056					
			11055					
			11054					
			11053					
			11052					
			11051					
			11050					
			11049					
			11048					
			11047					
			11046					
			11045					
			11044					
			11043					
			11042					
			1 @ 11041					
			11040	1				
	1		11039					
			11038					
			11037					
			11036					
			11035					
			11034					

Korekcijos

- Labai dažnai pasitaiko akcijų rinkoje
- Korekcija – pataisymas kainos, kiekio ar laiko
- Ištrynimasis – išėmimas neteisingo tiko
- Įterpimas – įterpimas praleisto tiko



Atostogos

- Savaitgalis
 - 24val rinkos atsidaro sekmadieni 17:00
- US akcijų rinka tiesiog nedirba
- EU akcijų rinka tiesiog nedirba
- EUREX - nedirba
- Ateities sandorių rinkos užsidaro anksčiau prieš ir nedirba per atostogas
- FOREX – 1 min pertrauka

CME Globex[®] Martin Luther King Holiday Schedule

CME Group Equity Products

Friday, Jan 15

1515 CT – Regular CME Globex close for trade date Friday, Jan 15

Sunday, Jan 17

1700 CT – Regular CME Globex open for trade date Tuesday, Jan 19

Note: Day/Session orders entered on Sunday are for trade date Tuesday, Jan 19 and will continue working until Tuesday's close at 1515 CT

Monday, Jan 18

1030 CT – Trading halt

- Order entry, modification and cancellation allowed

1700 CT – Halted products resume trading

Tuesday, Jan 19

1515 CT – Regular CME Globex close for trade date Tuesday, Jan 19

CME Group Interest Rate Products

Friday, Jan 15

1515 CT – Early CME Globex close for all CME interest rate and CBOT financial products for trade date Friday, Jan 15

Sunday, Jan 17

1700 CT – Regular CME Globex open for CME interest rate products for trade date Tuesday, Jan 19

1730 CT – Regular CME Globex open for CBOT financial products for trade date Tuesday, Jan 19

Note: Day/Session orders entered on Sunday are for trade date Tuesday, Jan 19, and will continue working until Tuesday's close at 1600 CT

Monday, Jan 18

1200 CT – CME interest rate and CBOT financial products trading halt

- Order entry, modification and cancellation allowed

1700 CT – Halted CME interest rate products resume trading

1730 CT – Halted CBOT financial products resume trading

Tuesday, Jan 19

1600 CT – Regular CME Globex close for trade date Tuesday, Jan 19

Istoriniai duomenų formatai

- Dieniniai
- Minutiniai
- Sadoriai (tick data)
- Geriausia pasiūlos/paklausos kaina ir kiekis
- Geriausia pasiūlos/paklausos kaina ir kiekis su 5-10 gyliu į abi puses

Date	
Time	Trade Data
Price	
Volume	
Exchange Code	
Sales Condition	
Correction Indicator	
Sequence Number	
Trade Stop Indicator	
Source of Trade	
MDS 127 / TRF (Trade Reporting Facility) (*)	
Exclude Record Flag	
Filtered Price	

```

01/11/2010,10:00:00.753,210.86,200,D,,00,155373,,N,Q,,
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Bid Price	01/11/2010,10:00:00.630,Z,210.81,210.88,1,1,R,,2487208,Z,Z,,0,,N,,,,,
Ask Price	01/11/2010,10:00:00.653,Z,210.81,210.88,1,2,R,,2487215,Z,Z,,0,,N,,,,,
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Ask Size (*)	01/11/2010,10:00:00.743,P,210.8,210.87,6,1,R,,2487277,P,P,,2,,N,,,,,

Quote Condition (**)

Market Maker ID

Sequence Number

Bid Exchange (begins 01/01/2004)

Ask Exchange (begins 01/01/2004)

National BBO Indicator (begins 01/01/2004) (***)

NASDAQ BBO Indicator (begins 01/01/2004) (***)

Quote Cancel/Correction (begins 01/01/2004)

Quote Source

Retail Interest Indicator (RPI) (****)

Short Sale Restriction Indicator (begins 02/04/2013)

Limit-Up/Limit-Down BBO Indicator (CQS) (begins 02/04/2013)

Limit-Up/Limit-Down BBO Indicator (UTP) (begins 02/04/2013)

FINRA ADF MPID Indicator (begins 02/04/2013)

Quote data

Pabaiga