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1 Download Interactive Broker TWS

Link:

https://www.interactivebrokers.com/en/index.php?f=1604

🍦 Interactive Brokers		RCH	Q	LOG IN 👻	OPEN ACCOUNT -	FREE TRIAL
TRADER OR INVESTOR -		PRICING 👻	TRADING 👻	EDUCATION -	ABOUT IB 👻	CONTACT US 🗸
TWS for Mac						
DOWNLOAD 🔸	Step One: Click the Down	load button t	o begin instal	ling TWS.		
Mac OS X: 64 bit File Size: 4MB Version 9522 Release Notes	Step Two: When the insta	allation is com	nplete, click th	ie TWS icon on y	our desktop to l	.og in.
	Need Help? View Installa	tion Instructio	ons 🗗			
	If you've forgotten your lo	gin credentia	als, please cor	tact Customer S	Service 🗗	
Download for Other Operating Systems						

This broker software in mandatory to iTrading.

2 Execute TWS

🛛 🖨 🗘 Login		
	SIMULATED TRADING	
		? 💿 <u>No user name?</u>
User name	demo_tws	Try the demo
Password		
Trading Mode	Paper Trading 🛛 🔻	
Color Palette	dark 🔻	
Settings directory	/Users/joelpinheiro/Jts	<u>B</u> rowse
	 Use/store settings on server Use SSL 	
More options	L <u>o</u> gin <u>C</u> ancel	
	SIMULATED TRADING	

- 1. Change the Trading Mode to "Paper Trading"
- 2. Then click on "Try the demo" on the right side.
- 3. Login

If you want to create a new IB Account see section 2.1.

2.1 New Interactive Broker Account

Link:

https://gdcdyn.interactivebrokers.com/Universal/servlet/Applica tion.ApplicationSelector

🍦 Interactive Brokers		
Email Address		А А
Email Address Algorithmic 1 https://www.	Required frading redit.com/ralgotrading/	
Register Your Username		Call Us
Username	Required	Monday - Friday
Password	Required	00800-42-276537 +41-41-726-9500
Confirm Password	Required	
	Username Requirements K Lower case only, no spaces, no special characters Begin with a letter Contain a minimum of 3 letters and 3 numbers Length of 8 or 9 characters	English Français Deutsch Español Русский Italiano 简体中文 繁體中文 日本語

itr **A** D I N G

3 Configure TWS

Configure > API > Settings

😵 🖨 🗘 Interactive Bro 😵 DU226951 Trader Worksta	tion Configuration (Demo System)	
enter filter text here	API - Settings	lavent o t c po pc
Configuration	General	AA Locked 16:28:26
	Enable ActiveX and Socket Clients	Help / Ticker Lookup 🔍 📭
Pending (All) Export Trade Reports	🔳 Read-Only API 🐵	
Untitled X Pending Hotkeys	Download open orders on connection	💎 Filter
Lock and Exit	Include FX positions when sending portfolio	Position
Contract Smart Routing	Send status updates for EFP and Volatility orders with "Continuous Update" flag	Status Trade Price Cancel
- 🕒 Sound Manager	Socket port 7496	8
Volatility and Analytics	Use negative numbers to bind automatic orders	
- Settings	Create API message log file	
Precautions	Include market data in API log file	
🔶 🗖 Display	Logging Level Error	
Trading Tools	Master API client ID	
- Minormation roots	Timeout to send bulk data to API 30 seconds	
- 📮 Orders	Component Exch. Separator	
Presets	Poret ADI order ID conjunce	
Account window	Reset API of del 10 sequence	
	Allow connections from localnost only w	
	Create	
Some options are hidden		
	OK Apply Cancel	
		-
Mosaic Classic TWS +		

Apply the *following* configuration.

API - Settings
General ————
Enable ActiveX and Socket Clients
🔲 Read-Only API 🞯
Download open orders on connection
Include FX positions when sending portfolio
\blacksquare Send status updates for EFP and Volatility orders with "Continuous Update" flag
Socket port 7496
🗹 Use negative numbers to bind automatic orders 🛛 🐵
Create API message log file
Include market data in API log file
Logging Level Error 🗾 🔽
Master API client ID
Timeout to send bulk data to API 30 seconds 💿
Component Exch. Separator
Reset API order ID sequence
Allow connections from localhost only 💿

4 Download iTrading

Link: http://joelpinheiro.github.io/itrading

i T R ▲ D I N G	ABOUT	FEATURES	VIDEO	DOWNLOAD	CONTACT
	Download				
√ IB	To run iTrading you need: ✓ interactive Brokers (IB) valid account s Latest Standalone Traders Workstation (TWS) installed and r ✓ Demonstration Video	unning			
LINUX	MAC-OS		١	VINDOWS	
V 0.9.0 Beta	∨0.9.0 _{Beta}		۷ ۲).9.0 Beta	
 8 Advanced Charts, 1 Indicator 	✓ 8 Advanced Charts, 1 Indicator		 8 Advanc 	ed Charts, 1 Indica	tor

Download your corresponding iTrading version.

5 Use cases

5.1 Browse and interact with charts/indicators

RADING ACC	OUNTSUMMARY	OPEN POSITIONS ALGOTRADER	monstration	
Quotes		Data Analysis and Indicators		
Search for	Go!	Charts 👻		
Facebook		Candlestick	AAPL Stock Price	=
Google		SMA Indicator Single line series All Compare multiple series	From Nov 3, 2	015 To May 3, 2016
Microsoft		Dynamically updated data		
Tesla		OHLC Plot lines on Y axis		120
Apple		Plot bands on Y axis Reversed Y axis		
My Portfolio		Innull.	րորությունը հետությունը	¹
			H . H	100
Туре	Value			
AccruedCash	0.00		i di u fi i	90
AvailableFunds	1000000.00	16. Nov 30. Nov 14. Dec 28. Dec 11.	Jan 25. Jan 8. Feb 22. Feb 7. Mar 21. Mar 4.	Apr 18. Apr 2. May
BuyingPower	4000000.00			
EquityWithLoanValue	1000000.00	2010	2012 2014	2016
FullinitMarginReq	0.00			Highcharts.com
GrossPositionValue	0.00			

5.2 Browse the Account Summary

	OUNTSUMMARY OPEN POSITIONS AL GOTRADER	•	
Account Summa	ry		
Account	Account Summary	Value	Currency
DU226951	AccruedCash	0.00	USD
DU226951	AvailableFunds	1000000.00	USD
DU226951	BuyingPower	400000.00	USD
DU226951	EquityWithLoanValue	1000000.00	USD
DU226951	ExcessLiquidity	100000.00	USD
DU226951	FullAvailableFunds	1000000.00	USD
DU226951	FullExcessLiquidity	100000.00	USD
DU226951	FullinitMarginReq	0.00	USD
DU226951	FullMaintMarginReq	0.00	USD
DU226951	GrossPositionValue	0.00	USD
DU226951	InitMarginBeq	0.00	USD
DU226951	LookAheadAvailableFunds	100000.00	USD
DU226951	LookAheadExcessLiquidity	1000000.00	USD
DU226951	LookAheadInitMarginReq	0.00	USD
DU226951	LookAheadMaintMarginReq	0.00	USD
DU226951	MaintMarginReq	0.00	USD
DU226951	NetLiquidation	1000000.00	USD

5.3 Browse Open Positions

Depen Positions Account summary OPEN Positions	• •					iTra	ding - Demonstr	ation				
Open Positions Image Network Security Type Explay Nale Right Multiplier Exchange Currency Local Symbol Trading Class 26598 APL STK 0 INASDAQ USD APL NMS	TRADING	ACCOUNTSU	IMMARY OPEN	I POSITIONS	ALG01	RADER						
ID Symbol Security Type Expiry Btrike Right Multiplier Exchange Currency Local Symbol Trading Class 255598 AAPL STK 0 NASDAQ USD AAPL NAS 255598 AAPL STK 0 NASDAQ USD AAPL NAS	Open Posit	ions										
285588 AAPL STK 0 IMAGMQ USD AAPL IMMS 285588 AAPL STK 0 IMAGMQ USD AAPL IMMS	ID	Symbol	Security Type	Expiry	Strike	Right	Multiplier	Exchange	Currency	Local Symbol	Trading Class	
28558 APL STK 0 NAGOAQ USD APL NMS	265598	AAPL	STK		0			NASDAQ	USD	AAPL	NMS	
	265598	AAPL	STK		0			NASDAQ	USD	AAPL	NMS	

5.4 Algorithmic Trading



Click on "INFO TOUR" to have a guided tour on AlgoTrading functionalities.

Omega intrading - Demonstration	
1 STOCK 3 STMBOL 'APPL' TURBORT' 'MBO'' TURBORT' 'MBO''	
6 ACTION = 'SELL' 7 QUARTUTY = 1 9 FRICE = 0.5 10 == stock_market 11 == stock_market 12 == stock_market 13 == stock_mark	Your Scripts "APt" "atock_appl.lua.lua"
To switch between trades you have to select one of them.	Loaded Script
22 DUANTIY = 1 21 PRICE = 0.01 24 LIMITERICE = 0.5 25DOSY LIMITERIARYCURRENCY, SECUNDARYCURRENCY, ACTION, OUANTIY, FRICE)	Script Name Datetime Cloud Active Delete
Forex market (PRIMARCURRENC, SECURDARYCURRENCY, ACTION, GUANTITY) 28 - forex stop(PRIMARYCURRENC, SECURDARYCURRENCY, ACTION, GUANTITY, PRICE) - forex stoplinit(PRIMARYCURRENCT, SECURDARYCURRENCT, ACTION, GUANTITY, PRICE, LIMITFRICE, 33	
32 CED 33 CURRENT - 'UBD' 34 EXCLUMES - 'SAUAT' 35 EXCLUME - 'SAUAT'	Save Script
37 DUANTIY - 1 38 PRICE - 0.01 38 LIMITPAICE - 0.01 40rdf limitsformadi, currency, exchange, action, duantity, price)	Script Name
42df market (SYMBOL, CURRENCY, EXCHANGE, ACTION, QUANTITY) 43df stop(SYMBOL, OURSENCY, EXCHANGE, ACTION, QUANTITY, FRICE) 44df stoplinit(SYMBOL, CURRENCY, EXCHANGE, ACTION, QUANTITY, FRICE, LIMITPRICE, STOPPRICE 45organ.	Market Data Subscription
47 SYMBOL = 'AAPL' 48 CURRENCE = 'USD' 49 SXCHANGE = 'SARR' 50 ACTION = 'SUY'	
S. PALCE COL = 0.5 SS PALCE COL = 0.5 SS STOPPALCE = 1 SSCODE Limit(SYROL, CURRENCY, EXCHANGE, ACTION, OUANTITY, FRICE)	Market Data Param
56 combo_market (SYMBOL, CURRENCY, EXCHANGE, ACTION, QUANTITY)	

iTrading - Demonstration				
13stock stop (SYMBOL, EXCHANGE, CURRENCY, ACTION, QUANTITY, PRICE)				
14stock stoplimit (SYMBOL, EXCHANGE, CURRENCY, ACTION, QUANTITY, LIMITPRICE, STOPPRICE)				
15				
IS DE TARDYCIDERNCY = 'IISD'	Loaded Script			
20 SECINDABYCUBBENCY = 'EUB'				
21 ACTION = 'BUY'				
22 DUANTITY = 1 Loaded Script	Script Namo	Datatima	Cloud Activo	Delete
23 PRICE = 0.01	Goript Name	Datetime	Cidda Active	Delete
24 LIMITPRICE = 0.5	_		_	
This section you have the information	API	30/3/2016 @ 11:47:9	false	
21 forex market (PRIMARYCURRENEY, SECUNDARYCURRENEY, at regarding the trade you selected in Your				
28 forex stop (PRIMARYCURRENCY, SECUNDARYCURRENCY, AC Scripts section, PRICE)				_
29 forex_stoplimit(PRIMARYCURRENCY, SECUNDARYCURRENCY, ACTION, QUANTITY, PRICE, LIMITPRICE,				
Begarding each trade you have the name of				
Regarding each trade you have the name of				
sis currency = 'usp' the script, date and time when you saved, if				
34 EXCHANGE = 'SMART' is automatic to run and the delete button to	Save Script			
35 SYMBOL = 'AAPL' remove the trade.				
36 ACTION - 'BUY'				
37 DUANTITY = 1 Next	Corint Namo			
39 LINUTPRICE = 0.5	Script Name			
40 STOPPRICE = 1				
41 ofd limit (SYMBOL, CURRENCY, EXCHANGE, ACTION, QUANTITY, PRICE)				
42cfd_market(SYMBOL, CURRENCY, EXCHANGE, ACTION, QUANTITY)	Market Data 3	Subscription		
43 cfd_stop(SYMBOL, CURRENCY, EXCHANGE, ACTION, QUANTITY, PRICE)				
44 CTG STOPIIMIT(SIMHOL, CORRENCE, EACHANGE, ACTION, QUANTITE, PRICE, LIMITPRICE, STOPPRICE 45				
46 COMBO				
47 SYMBOL - 'AAPL'	Market Data	a Type		
48 CURRENCY - 'USD'				
49 EXCHANGE = 'SMART'				
SURCTION = 'BUY'				
52 PRICE = 0.01	Market Data	a Param		
53 LIMITPRICE = 0.5				
54 STOPPRICE = 1				
55 combo limit(SYMBOL, CURRENCY, EXCHANGE, ACTION, QUANTITY, PRICE)	🛆 SI	JBSCRIBE MARKET	DATA	
50 COMDO MARKET(SIRBUL, CURRENCI, EXCHANGE, ACTION, (QUANTITY)	÷ •			
58 -combo stoplimit(SYMBOL, CURRENCY, EXCHANGE, ACTION, OUANTIT, PRICE, LIMITPRICE, STOPPRI				
59				
61 FUTURE	1			
62 SYMBOL = 'AAPL' (2 SYMBOL = 'AAPL'	Automat	e Trade?		
64 CURRENCY = 'USD'		_		
65 EXCHANGE = 'ONE'	A SAV	F		
66 ACTION - 'BUY'	5/V			
67 QUANTITY = 1				

ITradin iTradin	g - Demonstration
33 CURRENCY = 'USD' 34 EXCHANGE = 'SMART'	Save Script
35 SYMBOL = 'AAPL'	
36 ACTION = 'BUY'	x
Save Script	Control Name
38 PRICE = 0.01	Script Name
AS STORDER = 1	
41 ofd limit (SYMBOL, CURRENCY, EXCHANGE, ACTION, OUL Here is the section with	ere you can add to
42 ofd market (SYMBOL, CURRENCY, EXCHANGE, ACTION, of your local storage a n	ew trade script. Market Data Subscription
43 cfd stop (SYMBOL, CURRENCY, EXCHANGE, ACTION, QUANTITY, PRICE)	Wanter Data Gabsonpatier
44 cfd_stoplimit(SYMBOL, CURRENCY, EXCHANGE, ACTION, It is mandetopate inse	and a name in the
45 Relation of the second seco	at a name in the
46 COMBO Script and if it will be a	Active for automatic Market Data Type
47 STMBOL = 'AAPL' trading.	and the second sec
49 EXCHANCE - 'SMPT'	
50 SCRION - 'BUY'	to be active for
51 QUANTITY = 1 automatic trading you	should add a market Market Data Param
52 PRICE = 0.01 automatic trading, you	I Should adult a market
53 LIMITPRICE = 0.5 data subscription to a	greggate all types of
54 STOPPRICE = 1 market data that your	trade script will be
55 COMDO LIMIT (SYMBOL, CURRENCY, EXCHANGE, ACTION, UNICKED)	SUBSCRIBE MARKET DATA
55 -combo stop (SVROL CURPENCY EXCHANGE ACTION CURPENCE)	
58 combo stoplimit (SYMBOL, CURENCY, EXCHANGE, ACTION News, Y, PRICE,	LIMITERICE, STOPPET
59	
60	
61 FUTURE	
62 SYMBOL - 'AAPL'	Automate Trade?
63 EXPIRE - 201/0118	
6 STORAL CI = 'ONE'	
66 ACTION = 'BUY'	AVE
67 DANTITA = 1	
68 PRICE = 0.01	
69 LIMITPRICE = 0.5	
70 STOPPRICE = 1	
72 future market (STREAD, EXPIRE, CURRENCE, EACHANGE, ACTION, QUARTITE, P	ALCE)
73 future stop (SYMBOL, EXPIRY, CURRENCY, EXCHANGE, ACTION, OUANTITY, PR	ICE)
74 future stoplimit (SYMBOL, EXPIRY, CURRENCY, EXCHANGE, ACTION, QUANTIT	Y, PRICE, LIMITPRICE
75	
76 OPTION	
77 SIMBOL = 'AAPL'	
70 SAPIRE = 40.00	
BO RIGHT = 101	
81 EXCHANGE = 'SMART'	
82 CURRENCY = "USD"	
83 ACTION = 'BUY'	
84 QUANTITY = 1	
SPRICE = 0.01	
87 STOPPRICE = 1	
88 option limit (SYMBOL, EXPIRY, STRIKE, RIGHT, EXCHANGE, CURRENCY, ACTI	ON, QUANTITY, PRICE)
89 option market (SYMBOL, EXPIRY, STRIKE, RIGHT, EXCHANGE, CURRENCY, ACT	ION. OUANTITY)



6 Questionary

Link:

https://docs.google.com/forms/d/1WKjgGOCwYRYKfQSYdWNIPy7N8fln CxgHeR3GoeWACvg/viewform?edit_requested=true

 FRICE = 0.01 SUBTIFICE = 0.5 STOPFNICE = 1 STOPFNICE = 1 STOPFNICE = 1 	If lading - Demonstration If the second sec
 - Force state of the constraint of	The Control Particle Co
<pre>0 ==12 transitions_texture_textur</pre>	

7 Issues

Link: https://github.com/joelpinheiro/itrading/issues

