Automated trading

Do your first automated trade in 45 minutes

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Automated Trading Workshop - How to participate

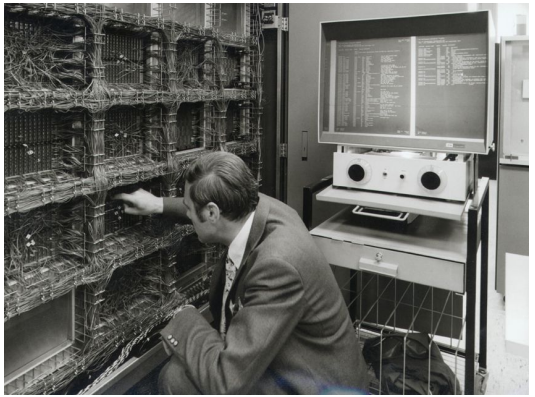
WATCH

YOUR NEIGHBOR GO

TRADE

FROM THE COMMAND LINE

TINKER



ENHANCE THE CODE

[BRING YOUR LAPTOP !]

Who we are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Get your workshop instructions here

Introduction: the toolset

utilizing server side scripts written in **node.js** (we use v9.11.1)

using libraries installed with **npm** (we use v2.17.0)

persisting state and data in **mongodb** (we use v3.6.3)

source code from our **github** repository. Preferably using git tool. (we use v2.17.0)

explore with your favorite **text editor (sublime/atom/visual code/vi/…)**

use **Robo 3T** to **explore the database** (we use v1.2)

Introduction: the application

buy and **sell** coins using real **bitcoin**

place orders with two **command line utilities**

store **coin**, **order** and **historical data** in a **mongo** database

trade over a **REST API** on the **Poloniex** exchange

Demo: buy order GNT

<screencap demo commandline plaatsen/uitvoer van de order>

Demo: sell order GNT

<screencap demo commandline plaatsen/uitvoer van de order>

Installing node.js (and get npm for free)

Install:

follow instructions @ http://bit.ly/in45-nodejs

Test:

create file ***index.js***
add content:
console.log ('Welcome to Node.js!');
run file (from command line / shell):
node test.js

Installing mongodb

Follow instructions @ http://bit.ly/in45-mongodb

Test:

run command (from command line / shell):
mongo

you should be able to open the mongodb shell

For convenience, you can install Robo 3T @ http://bit.ly/in45-robo3t

Clone or download repository

Clone repository (from command line / shell):

git clone git@github.com:blockchain030/autotrade.git autotrade-master

Download (if you don’t have git installed)

Download the zipped repository @ http://bit.ly/in45-github

Unzip in a folder (from command line / shell):

unzip autotrade-master.zip

Finish installation

Open command window / shell
Go to autotrader directory:

cd autotrader-master

Install libraries:

npm install

Test:

node index.js
-> “Welcome to autotrader”

Keys and settings

create a settings file

copy settings/Trade-settings-sample.js -> settings/Trade-settings.js

fill in settings:

exchange: ~~register at poloniex.com~~ and generate an API key/secret

Use our API key and secret.
Use a $5 portfolio so that everyone can do trades
Let’s make some profit!

NB. Always use a secondary account while testing!

Start the traderbot

Open a command window / shell

go to the autotrade folder

launch the traderbot backend

node index.js

Prepare a buy order

Use your designated coin!

Open http://poloniex.com, check exchange rates:

- Calculate amount of target currency for **~$5 order**
- Determine desired exchange rate

Examine buy tool (from command line / shell):

- **node buy.js --help**

Execute buy order (from command line / shell)

- **Go figure it out yourself :-)**

Under the hood

buy.js

- checks the given parameters
- assembles a order recor

- creates order in the mongo orders collection (status = new-order)

Under the hood

sell.js / buy.js -> create orders and queue them

index.js -> This is where it happens!

- monitors the database for new orders
- creates trade orders on the exchange
- monitors the exchange for trade order status changes

Prepare a sell order

Now sell your designated coin for bitcoin

Open http://poloniex.com, check exchange rates

Determine desired exchange rate

Examine buy tool (from command line / shell):

node sell.js --help

Execute buy order (from command line / shell)

Go figure it out yourself :-)

Kickstart with historic data

Why? So you can quickly start validating your trading strategy

What? Zipped mongodump containing historic data

How? Install on locally running mongodb
Get autotrade-master-mipfs ongodump.zip
unzip autotrade-master-mongodump.zip
mongorestore autotrade-master-mongodump/dump

This takes about 30 minutes. While running your can already do mongo tradebot; show collections; db.ohlcv300.findOne()