# TRUFFLE

YOUR ETHEREUM SWISS ARMY KNIFE

#### WHAT IS TRUFFLE?

- Development Environment
- Testing Framework
- Asset Pipeline
- Makes the Developers Life easier
- We will work a lot (A LOT) with truffle in this course

#### THIS IS WHAT YOU GET

- Built in smart contract compilation
  - Linking
  - Deployment
  - Binary Management
- Automated testing for rapid development
- Migrations Framework
- Network Management (deploy to testnet/mainnet/private networks)
- Package Management with EthPM, NPM
- And much much (which we don't use)
- Including a great documentation

#### INSTALLATION & CONFIGURATION

- Via Node Package Manager
  - "npm install -g truffle"
    - Or the beta package if installation fails: "npm install –g truffle@beta"
  - NodeJS 5+, Windows, Linux, MacOSx
- Start a new project with "truffle init"
- Find the truffle.js config file
  - Which we will do later on

#### DEVELOPMENT WITH TESTRPC

- Rapid Development
- Great for testing
- Instant results
- No waiting time

- Great abstraction
- Promises instead of "waiting for transactions to be mined"

#### DEPLOYMENT WITH GETH

After testing (and more testing) deployment

Full Geth node recommended

- Possible to deploy to main-net, test-net, private networks
  - Just a matter of configuration

#### TESTING FRAMEWORK

- JavaScript tests in Mocha
  - Assertions in Chai
- We will do this extensively
- Can run all/selected tests

Great for continuous testing

## MORE INFORMATION

- We will describe all moving parts when we use them
  - Truffle-Contract
- Website of Truffle <a href="http://truffleframework.com/">http://truffleframework.com/</a>
- Great Documentation
- Fast & Convenient Development
  - Truffle init ...
  - "truffle init webpack"
- Trufflebox
  - With React/Redux pre-configured

## DRAWBACKS & GOOD TO KNOW

- Cannot import contracts from github
  - More on that later
- Does not have a debugger
  - Because it's a development framework
- Is not very clear for beginners what it's all for
- Different versions break backwards/forward compatibility

#### WHATYOU HAVE LEARNED

- Truffle is a Smart Contract Development Framework
- Makes testing and deployment easy
- Doesn't have a debugger or anything like that
- Great abstraction, works with promises

# QUESTIONS/SUGGESTIONS?

Head over to the Q&A

- Feedback?
  - We'd love to hear it!
- Disappointed?
  - Give us a chance to make things right.