



ethereum
vienna

DEVCON-2 Recap



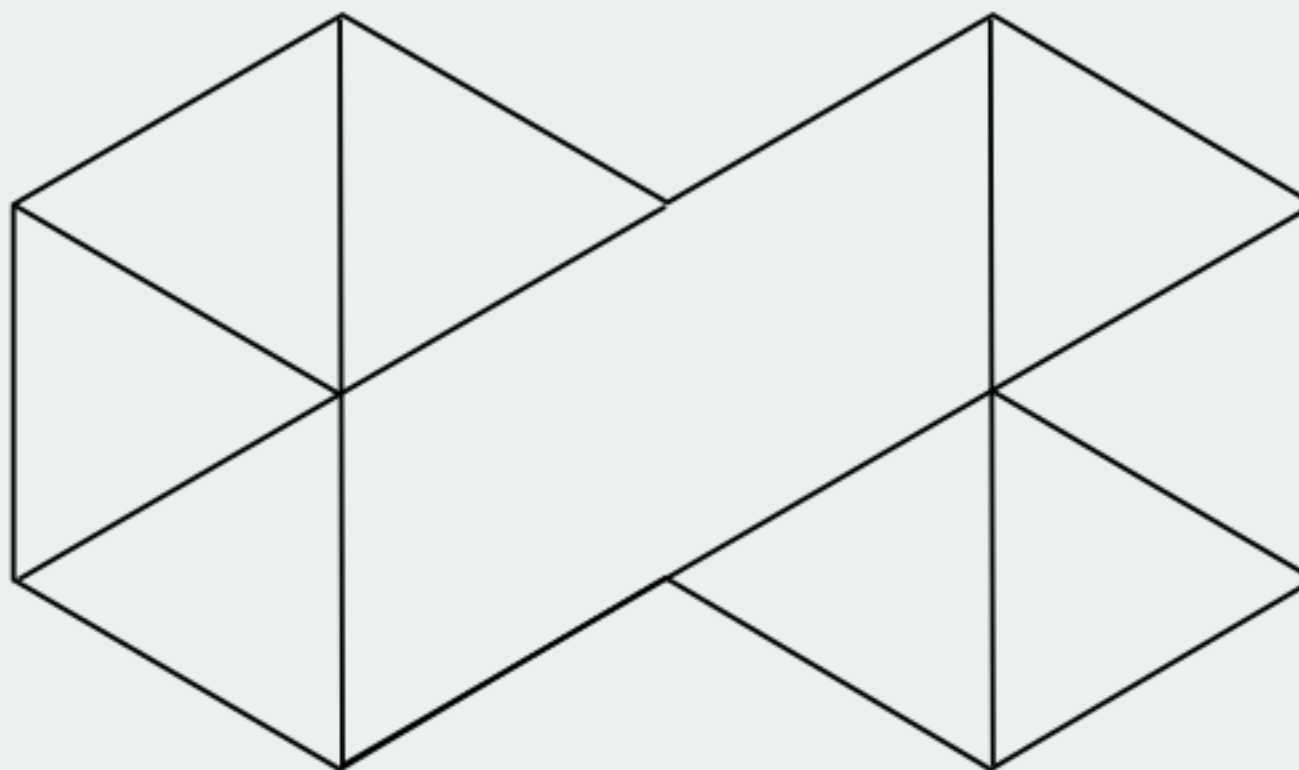
ethereum

Agenda

General Introduction

DEVCON-2 Recap

Socialising

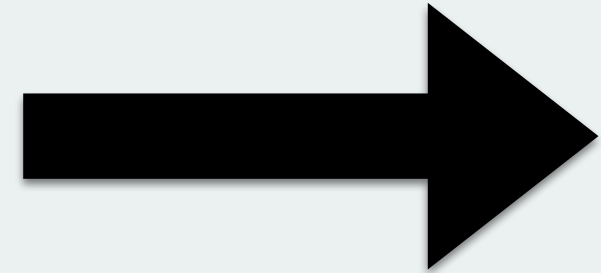


RIAT

RESEARCH INSTITUTE FOR ARTS AND TECHNOLOGY

ATM

Over there



and it still doesn't work

but there is hope (at least for the buying part)



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DEVCON-2 Recap

International Blockchain Week

Ethereum Foundation + Wanxiang Blockchain Labs

September 19th	DEVCON - Day 1
September 20th	DEVCON - Day 2
September 21st	DEVCON - Day 3
September 22nd	DEMO Day
September 23rd	Blockchain Summit - Day 1
September 24th	Blockchain Summit - Day 2

DEVCON-2

Annual Ethereum Developer Conference

premier sponsor _____



platinum sponsors _____



DEVCON-2

gold sponsors



community sponsors



DEVCON-2

Hyatt at the Bund



DEVCON-2



DEVCON-2



DEVCON-2

Day 1

DEVCON-2

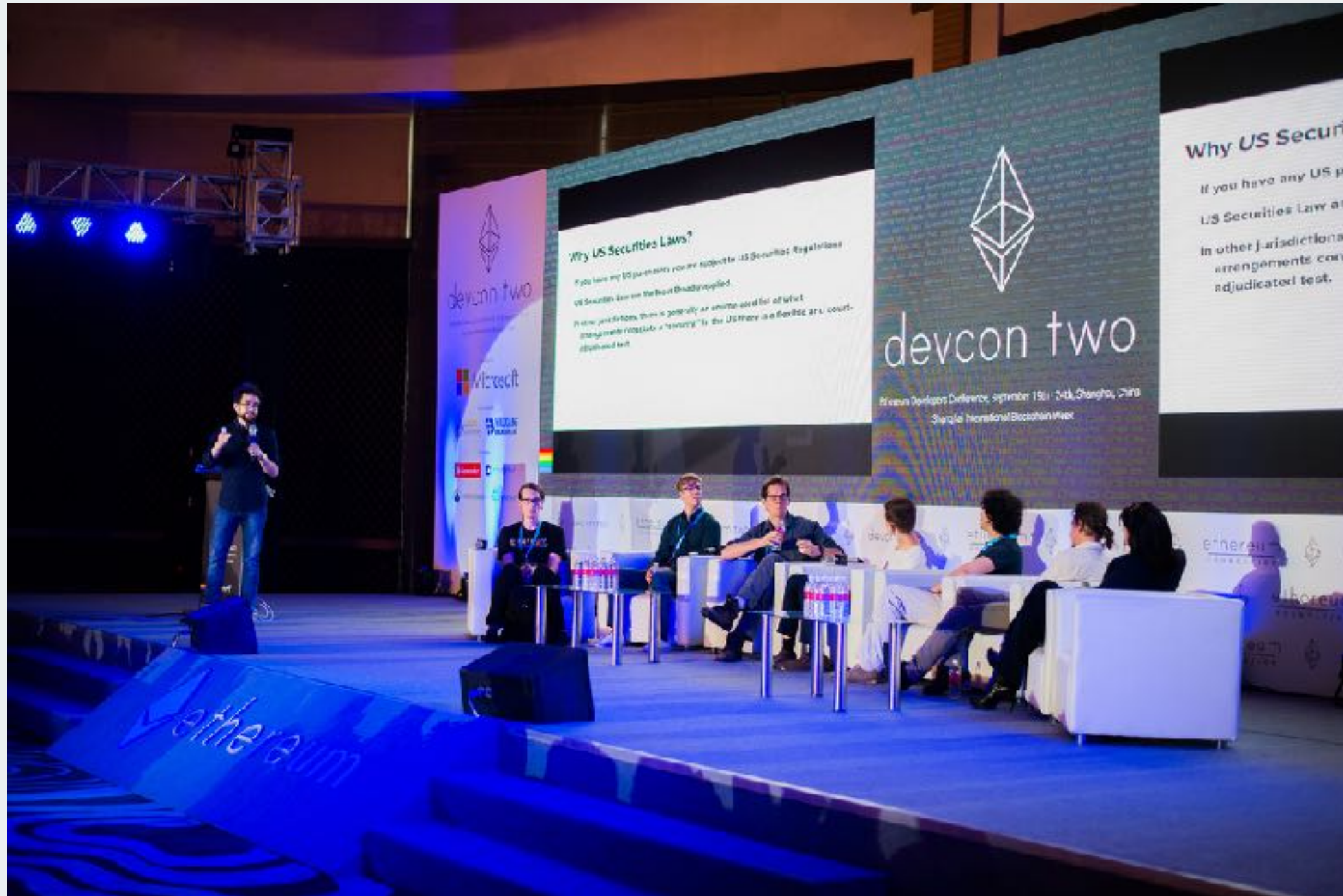
DDOS Attacks since the beginning of DEVCON

Many geth releases in the last weeks

Parity mostly unaffected

"Fahrt nach Hause"

DEVCON-2



DEVCON-2



DEVCON-2

Lots of talks about smart contract security

Formal verification

Escape Hatches

Bug Bounties

Many talks about security on Day 2

DEVCON-2

swarm

presented SWAP, SWEAR

like most talks, way too short

didn't even get to SMASH / CRASH

DEVCON-2

raiden

payment channel network

working prototype

will be available "soon"

DEVCON-2

truebit

secure offchain computations

security deposit

slashed if fraud is detected

uses merkle proofs for efficient fraud proof

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Parity client will ship it's own UI soon

Will support ERC-20 tokens

Parity also mostly unaffected by DDOS Attacks

=> move to parity

DEVCON-2

State channels

- overview of how they work

- offchain computation

- generalisation of micropayment channels

- raiden-like network

Recommended Talk!

DEVCON-2

eWASM

effort to move ethereum from EVM to WebAssembly
could vastly improve performance

EVM2WASM transpiler

Passes all EVM tests

DEVCON-2

Casper

2 different versions of casper are looked into

Vitalik Casper

Vlad Casper

Mauve

New version of Mauve paper by Vitalik

Now with pictures!

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Zcash

Launches Oct 28th

Project Alchemy

verify Zcash POW in solidity

ZRelay

trustless swap of ETH and Zcash

Baby Zoe

Zcash as ethereum contract (needs precompile)

DEVCON-2



DEVCON-2



DEVCON-2

Day 2

DEVCON-2



DEVCON-2

Many talks on security

- solgraph

 - visualizes solidity control flow

 - highlights potential vulnerabilities

- talks about security best practices

- formal verification

 - why3

 - microsoft research paper: solidity \rightarrow F*

 - imandra

DEVCON-2

ether.camp

Ethereum Studio now easily deployable on Azure

Ether Camp Hackathon in November

5 Weeks

1st place = 50k

<http://hack.ether.camp>

Hacker Gold - Virtual Accelerator

DEVCON-2

Banco Santander announced CashEth

Banco Santander backed stable token

Linked to bank account

Easy conversion between fiat and stable token

DEVCON-2

Metamask

- Turns browser into Mist

- Will work with major desktop browsers (except safari)

- Works with chrome already

- Ready for Opera, Firefox and Edge

Mascara: JS library

- turns browser without metamask into ethereum browser

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Light client

Geth as a library

Future of Solidity

ENS: Ethereum Name System

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Major releases of every dev framework

Dapple

Truffle

embark

Old version were bad

Maybe the new ones are better

DEVCON-2

Oyente

Analysers for smart contracts

Symbolic execution

Can detect popular bugs

Can generate tests

is now open source on [ethereum github](#)

DEVCON-2

Remix

Ethereum Debugger as an NPM module
can be easily integrated into other tools
still at an early stage

Mango

decentralised github
ethereum + swarm / IPFS

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Day 3

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Microsoft

Bletchley 1.0

Easily spinning up consortium ethereum networks

5-8 minutes

8 question

with 100s of nodes

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Microsoft

Cryptlets

Offchain computation in enclaves

"Cryptlets are off-chain code modules that are written in any language that can execute within a secure, isolated, trusted container and is communicated with over secure channels.

Cryptlets can be used in SmartContracts and UTXO systems when additional functionality or information is needed, upgrading the blockchain "oracle" approach with a Cryptlet and CryptoDelegate or adaptor."

<https://github.com/Azure/azure-blockchain-projects/blob/master/bletchley/CryptletsDeepDive.md>

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web3.js is undergoing major redesign

Promises by default

EventEmitters (.on) instead of callbacks everywhere

Many weird bugs in current web3.js (!)

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Otonomos

Helps companies to incorporate on the blockchain

Takes care of filing and paperwork

Also provides blockchain based voting

p2p share transfer

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IPFS

available as go-ipfs and js-ipfs

=> ipfs in the browser

Filecoin will be built on top of ETH

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Maker

One of the older stablecoin projects

Simplecoin

Platform for centrally administered stablecoins

Issuers create own ruleset

collateral, participants, security ...

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Orbit

Decentralised chat room

Ethereum

IPFS

Integrates with uport for Identity

DEVCON-2

React Dapp Architecture

framework from Nick

now on github

still in development

Demo Day

DEMO Day

17 projects built on top of ethereum

Many identity systems

Many rely on centralised points

1st prize: uPort identity system

Further winners: WeiFund, Cosmos

DEMO Day

uPort

Identity system for ethereum

Consensys Project

Key management

Separates private key from Identity

=> multiple keys for one Identity

DEMO Day

uPort

Social Recovery

Select a group of friends

Together they can add a new key to your identity

Private key on mobile

transaction on desktop

sign by scanning qr code

DEMO Day

Weifund

decentralised crowdfunding

Consensys Project

already covered it at the last event

DEMO Day

Cosmos

A network of blockchains

Uses tendermint

Can allow blockchains to communicate

DEMO Day

ujo

"Fair DRM" for music

bestowit.global

Wills on the blockchain

decentralized capital

Stable Coin

digix

Gold Token

devita

Incentivised Q&A Platform

Blockchain Summit

Day 1

Blockchain Summit

Wanxiang going to build a smart city in 10 years

30 billion dollars (USD)

Everything connected

IoT, Smart Living, Smart Transport

Many use cases for blockchain

Partnering with

Microsoft, IBM,

Consensys, Ethereum Foundation

WeBank, AliCloud

Blockchain Summit

Minsheng Life Insurance

+ Blockapps

+ Consensys

employee appreciation and loyalty program

Blockchain Summit

BHP

uses Ethereum to track geological samples

working with Consensys + BlockApps

Runs on Ethereum, IPFS and Azure

see David Burela Recap for Details

Blockchain Summit

Cotricity

Consensys project

energy market on the blockchain

Blockchain Summit

Day 2

Blockchain Summit

Chronicaled

Connects physical goods to blockchain

Microchips with private key

Authenticity and Provenance

Blockchain Summit

Augur

Prediction Market

Covered before

REP token live since yesterday !

Blockchain Summit

ZCash

Factom

OpenBazaar

Everledger

Stellar

A detailed recap can be found at
davidburela.wordpress.com



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Updates

Ongoing DDOS Attacks

New DDos Attacks are still ongoing

Mostly against geth nodes

parity nodes not affected as much

Many geth releases came out recently

=> make sure to be on the latest version

Ongoing DDoS Attacks

Attacks seem to be targeting specific events:

DEVCON-2

FirstBlood Crowdsale

REP token launch

Future Workshops

New event for Beginner Workshop on meetup soon

Advanced Workshop (Contracts)

Date Finding coming soon

Probably in November

Waiting for React DApp Framework to mature

github.com/ahirner/ethereum