



# ethereum

## vienna

Spurious Dragon  
Geth 1.5 and ENS



# ethereum Agenda

General Introduction

Updates

Ethereum Name Service (ENS)

Socialising



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Updates

# Geth 1.5

First big update in 8 months

Latest: 1.5.5 (6 versions!)

Initial GO Api, Android / iOS Support

RPC Changes

Spurious Dragon

# Spurious Dragon HF

At block 2,675,000 (Nov 22nd)

EIP155 adds basic replay protection

EIP160 increases the gas cost of EXP

EIP161 to get rid of empty spam accounts

EIP170 contract size limit

# Spurious Dragon HF

EIP161 defines an accounts as empty if

no code

nonce 0

balance 0

all empty accounts that are touched during a transaction will be deleted at the transactions end

# Consensus Issues

SD caused fork between geth and parity on Morden

Morden abandoned

=> new testnet: Ropsten

# Consensus Issues

SD caused fork between geth and parity on Mainnet

parity reversed account deletions on OOG

geth didn't

triggered by the state clearing process

=> geth chain was abandoned



# Spurious Dragon HF

State clearing process is now complete

geth --fast resync to get a smaller datadir

# Light Client

# Geth 1.5

LES protocol can enabled with --light

Client ready to use in a minute or two

Works quite well, but still considered experimental

Performance issues with lots of filters (UI Wallet)

Swarm

# Geth 1.5

Swarm alpha now ships with geth (POC 0.2 RC5)

Separate "swarm" binary

SWAP functional, but switched off

No SWEAR or SWINDLE yet

ENS integration

# Onward

Focus now returns to Metropolis

Abstractions Changes

Mist Browser (now audited)

Infrastructure like SWARM / Whisper / ENS

Meanwhile CASPER / Sharding research continues

# Reading material

Somewhere on the ethereum github:

- FAQ on Sharding

- FAQ on POS

"History of Casper" Series by Vlad

- Part 1&2 on ethereum blog

- Part 3 and onward only on medium

Introduction to zkSNARKs (2 posts)

# Blockchain Startup Contest

2 main winners were ethereum projects:

[status.io](#)

etherisc

Other prizes went to

minebox

helperbit

bernstein



# Ethereum Vienna in 2016

18 events

10 meetups

7 workshops

280 new members (425 total)

Presentations from Nick Dodson and Grid-Singularity



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Ethereum Name Service (ENS)

# ENS

**E**thereum **N**ame **S**ervice

Resolves names to resources (address, swarm hash)

Domains and Subdomains:

sub.myname.eth

# ENS

3 main components:

ENS registry: maps names to resolvers

Resolver: maps names to resources

Registrars: allocates names (owner of names)

# ENS

Registry

deals with names instead of hashes

hash is derived from label + the rest of the domain

contract can verify the permissions for subnodes

by computing hash in contract

# ENS

Owner of a name

- can set the resolver for that name

- set the owner of subnodes

Resolver

- maps nodes to resources

# ENS

Nick Johnson Presentation

# ENS

Now deployed on Ropsten

.eth domains use a Vickrey auction

.test domains can be registered for free, but expire



# ENS

Vickrey auction:

Sealed Bid Auction (runs 7 days)

1 day reveal phase

Winner pays 2nd highest bid

Unrevealed / Invalid bids lose deposit

# ENS

Plan for mainnet:

.eth registrar active for 2 years

Then supposed to be replaced

Root name owned by multisig

Only name of at least 7 characters allowed

[github.com/ahirner/ethereum](https://github.com/ahirner/ethereum)