

# **SWARM**

SERVERLESS HOSTING
INCENTIVISED
PEER-TO-PEER
STORAGE AND
CONTENT
DISTRIBUTION

orange paper series talks on swarm code and status contact online press

Swarm is a distributed storage platform and content distribution service, a native base layer service of the ethereum web 3 stack. The primary objective of Swarm is to provide a sufficiently decentralized and redundant store of Ethereum's public record, in particular to store and distribute Dapp code and data as well as block chain data. From an economic point of view, it allows participants to efficiently pool their storage and bandwidth resources in order to provide the aforementioned services to all participants.

From the end user's perspective, Swarm is not that different from WWW, except that uploads are not to a specific server. The objective is to peer-to-peer storage and serving solution that is DDOS-resistant, zero-downtime, fault-tolerant and censorship-resistant as well as self-sustaining due to a built-in incentive system which uses peer to peer accounting and allows trading resources for payment. Swarm is designed to deeply integrate with the devp2p multiprotocol network layer of Ethereum as well as with the Ethereum blockchain for domain name resolution, service payments and content availability insurance.

#### orange paper series

The THERSPHERE orange paper series is an attempt to provide an umbrella for sharing and publishing cutting edge research about various aspects of the ethersphere. Our aim is to foster synergy between groups and individuals by creating a frictionless, collaborative editing platform with reputation, endorsement system based an ontology of skill categories, peer review, promototion, meme provenance tracking.

Swarm incentive system research papers. Call for peer review, proposals for improvement, criticism, encouragement and general feedback.

- Viktor Trón, Aron Fischer, Dániel Nagy A and Zsolt Felföldi, Nick Johnson: swap, swear and swindle: incentive system for swarm. May 2016
- Viktor Trón, Aron Fischer, Nick Johnson: smash-proof: auditable storage for swarm secured by masked audit secret hash. May 2016
- ETHERSPHERE: state channels on swap networks: claims and obligations on and off the blockchain (tentative title). to be published in Q3 2016

### talks on swarm

- Aron Fischer, Dániel A. Nagy, Viktor Trón: Swarm Ethereum Ethereum Meetup, Berlin, May 2016 [slides in pdf] [watch video on youtube] [watch/download video on swarm]
- Viktor Trón, Nick Johnson: Swarm, web3, and the Ethereum Name Service Ethereum Meetup, London, June 2016 [swarm slides in pdf] [ethereum name service slides in pdf] [watch video on youtube]
   [watch/download video on swarm]
- [in Hungarian] Nagy Dániel, Trón Viktor: Ethereum és Swarm: okos szerződések és elosztott világháló. Budapest Bitcoin Meetup. June 2016 [slides in pdf (in Hungarian)] [watch video on youtube (in Hungarian)]
- Dániel Nagy: Swarm: Distributed storage for Ethereum, the Turing-complete blockchain Linux Piter Nov 2015 [slides in pdf] [watch video on youtube]
- Viktor Trón, Dániel A. Nagy: Swarm Ethereum Devcon1, London, Nov 2015 [slides in pdf] [watch video on youtube]
- Dániel A. Nagy: Keeping the public record safe and accessible Ethereum Devcon-0, Berlin, Dec 2014 [slides in pdf] [watch video on youtube]

## code and status

- source
- issues on github
- development roadmap
- IPFS and SWARM

# contact

- @ethershere on twitter
- gitter swarm room
- swarm on swarm: bzz://swarm public gateway

# online press

- Ethereum's Viktor Trón talks about Swarm and the skeleton of Web 3.0. Ian Alison, IBTimes UK. May 18, 2016
- Decentralized Storage: the Backbone of the Third Web. Arthur Falls on Consensys Blog. June 30, 2016
- Decentralised storage Swarm to be built on Ethereum blockchain. Alexey Tereshchenko. Coinfox. 11 May, 2016