



# Ethereum Name Service

*All About the Ens*



# Intro

- Marc Zeller [@Barbuetchant](https://twitter.com/Barbuetchant)  
[/u/pandemiczell](https://www.reddit.com/user/pandemiczell/)
- Lemiscate on Telegram
- Marczeller.eth
- Founder of [Asseth](https://www.asseth.com/) (organizer of the EthCC, educational ethereum non-profit)
- Co-Founder of The Block Cafe
- Analyst @ Coinhouse (Regulated French Broker)

# Intro : What is Ethereum?



- Ethereum is a **Blockchain** : *Block* = Bunch of data *Chain* = Linked to each others.
- Blockchain is the worst, the slowest and the most expensive *database* ever built, but is the most secure **Ledger** ever built.
- *Public* Blockchains are **Decentralized**, (bunch of *Nodes*, no “turn-off” button)

# Intro : What is Ethereum?



ethereum

- Ethereum is a **World Computer**, designed to run unstoppable and immutable code.
- Ethereum host “Smart contracts”

Cons :

- Slow, Expansive, limited.

Pros :

- Secure, Unstoppable, *Trustless*

# Intro : What is Ethereum?



- The EVM is base 16, hexadecimal (From a to f and from 0 to 9)
- An **input** in hex transformed in binary (0 and 1) to run code

Every Ethereum Wallet have a unique Public Address written in hexadecimal and start with “0x” + 40 characters = 42 characters length

exemple :

0x010afb8548a5D1a3a3D62f58CA0a5A1329974206

# Internet Was Crap

Do you know :

- [172.217.19.238](#) ?
- [179.60.192.36](#) ?
- [193.164.196.82](#) ?

Internet : Every Website have at least one IP address in base 10 (IPv4) or hexadecimal (IPv6)

# Until...

The Solution ? A **Phonebook** (Domain Name Service) :

- [172.217.19.238](#) ? Google.com
- [179.60.192.36](#) ? Facebook.com
- [193.164.196.82](#) ? Leboncoin.fr

Human-readable addresses converted by the browser

A Objective : Better UX for Adoption

# The ENS

Ethereum have it's own “PhoneBook”

The Ethereum Name Service

- `0x010afb8548a5D1a3a3D62f58CA0a5A1329974206` ? `marczeller.eth`

Human-readable addresses converted by Web3

A Objective : Better UX for Adoption

A project supported by the Ethereum Fondation.

BNS (Blockchain Name Service) idea supported by Satoshi Nakamoto in 2011 (Namecoin)



# Funding your Wallets with some ETH

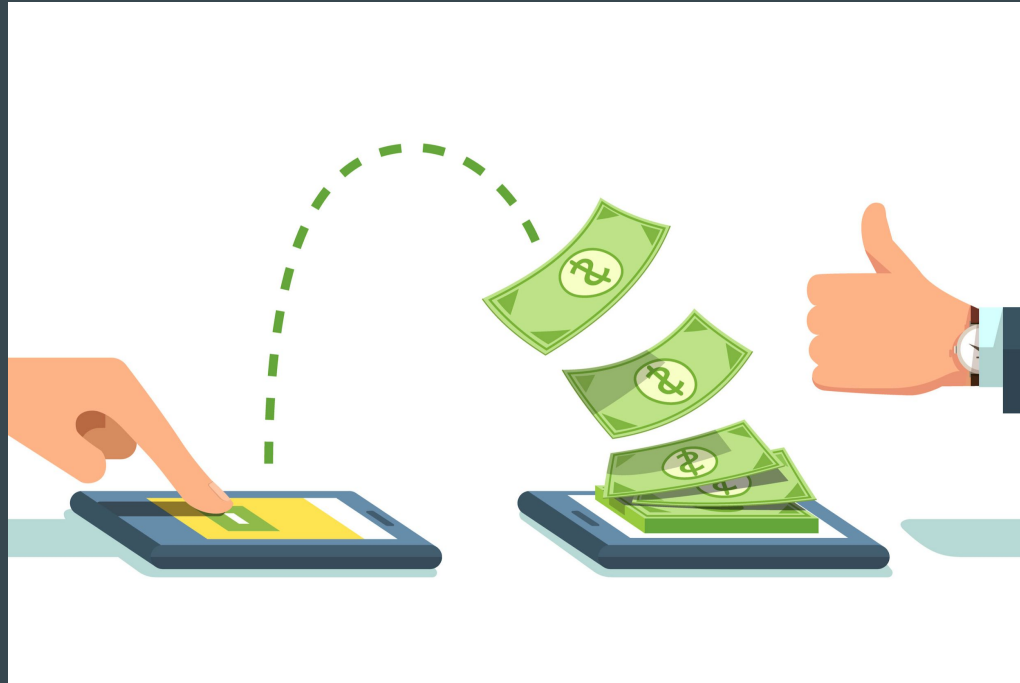
- The Contract : [0xe26FCE7f2bA3F8f1c56c2ef88B06AaeC3B513277](#)

```
34 function multiSendEth(address[] addresses) public payable {  
35     for(uint i = 0; i < addresses.length; i++) {  
36         addresses[i].transfer(msg.value / addresses.length);  
37     }  
38     msg.sender.transfer(this.balance);  
39 }  
40
```

- Few lines of code needed :
  - an array as input, public function
  - a loop to iterate through the addresses
  - divide the amount by the number of address, then send!

[OneClickDapp.com](https://OneClickDapp.com)

Simple Dapp interaction



# Ressources

Great Ressources :

[Etherscan](#) (Check your Txs)

[EthgasStation.info](#) (Never Overpay)

[Eth gas price chrome extension](#) (Know what you should pay)



# Dapp interactions

Gas is Oil, a commodity used to interact with the EVM

- Bitcoin is Gold, ETH is GAS
- Gas is Spam mitigation
- Gas is infinite loop issue solver.
- You can decide of how much you're willing to pay for gas (GASPRICE)
- You can decide the Max Amount of Gas you're willing to use to do stuff (GASLIMIT)



$$(GASPRICE * GASLIMIT) = TX Fee$$

How much you want to pay \* How many you want to use  
= Total Cost of doing stuff

# Dapp interactions

Good to know :

- Minimum Gas amount : 21k units (at a gas price of 1 Gwei/gas unit it's 0.000021 ETH (0.01\$))
- Gas is always paid in ETH so you need some ETH to send some fancy ERC20 tokens
- Gas limit too high ? Unused gas is always sent back!
- Wanna know more? Check the [Appendix G of the Yellow Paper](#)



Don't know what to do ?  
Don't touch the Gaslimit option of Metamask.

# The Ethereum PhoneBook

- Ethereum Name Service
- Replace the crappy 0x...
- Usable in almost every account interface
- A domain cost at least 0.01 ETH (1\$) and take 5 days to acquire... but a Subdomain starting price is less than 0.1\$ and instantaneous!
- Official service : [now.ens.domains](https://now.ens.domains)
- Alternative : [ethsimple.com](https://ethsimple.com)

Let's Get some great  
ENS domains!



# The ENS Manager

- A Public Resolver
- An Owner
- An Address
- Reverse Record
- Subdomains & Content ! (that's the fun part)



## The ENS Content + IPFS

- Inter Planetary File System
- Link your ENS to a file... that can contain other files.

marczeller.eth  
• Main Network

marczeller.eth

Owner



Details

Subdomains

PARENT

eth

OWNER



0x010afb8548a5D1a3a3D62f58CA0a5A1329974206

Transfer

REGISTRATION DATE

2018.01.15 at 10:01:45

RESOLVER



0x5FfC014343cd971B7eb70732021E26C35B744cc4



### RECORDS

ADDRESS

0x010afb8548a5D1a3a3D62f58CA0a5A1329974206



Reverse record: Set to marczeller.eth



CONTENT

0xb0085afc8d5a671ae71e67248239d63cf632f945d98515fd809b66c306b883da





Portal.network + Metamask

- Easy usage of IPFS with Portal.Network
- Metamask resolve the .eth Domains names



PORTAL NETWORK

**Simple use case : Redirection  
to your website with basic  
HTML**

- Converting IPFS Hash into Hex : [Pyrex Tool](#)



PORTAL NETWORK

# Q&A Time

*Ask Me Anything!*