ethereum

HOMESTEAD RELEASE

BLOCKCHAIN APP PLATFORM

Agenda

General Introduction

Homestead Release

Blockchain Tech in the Silicon Valley

Socialising

ethereum

HOMESTEAD RELEASE

BLOCKCHAIN APP PLATFORM

ethereum Homestead

Hardfork

At Block #1150000

> I0314 19:50:02.648887 core/blockchain.go:959] imported 1 block(s) (0 queued 0 ignored) including 9 txs in 29.952206ms. #1150000 [584bdb5d / 584bdb5d]

No longer ~~safe~~

No more kill switch

Implements:

EIP-2	Homestead Hard-fork Changes
EIP-7	DELEGATECALL
EIP-8	devp2p Forward Compatibility Requirements for Homestead

ethereum

Homestead

UI Wallet

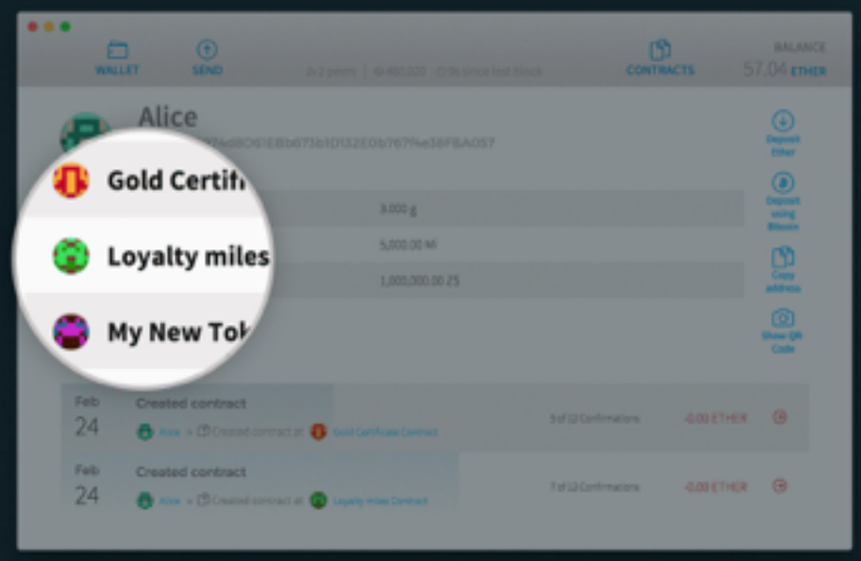
Recommended on ethereum.org

supposed to work.

Smart money, smart wallet

The **Ethereum Wallet** is a gateway to decentralized applications on the Ethereum blockchain. It allows you to hold and secure ether and other crypto-assets built on Ethereum, as well as write, deploy and use smart contracts.

DOWNLOAD
Ethereum Wallet (Windows 64 bits, Linux and OS X)



Hold ether or any Ethereum-based token in safe wallets

EIP-2

Gas cost increase for creating contracts with a tx

Frontier: 21000

Homestead: 53000

Eliminates cheap 1 to 1 transactions

Create Contract -> Immediate Suicide (11664 gas)

ethereum

EIP-2

s-values > secp256k1n/2 are now invalid

Eliminates transaction malleability

s = secp256k1n - s

v = v == 27 ? 28 : 27

Signature still valid, but tx hash different

EIP-2

Out of gas during contract creation

Frontier:

before the code is added to the state: No Contract

during the code is added to the state: Empty Code

otherwise: Working Contract

EIP-2

Out of gas during contract creation

Homestead:

before the code is added to the state: No Contract

during the code is added to the state: No Contract

otherwise: Working Contract

ethereum

EIP-2

Change in difficulty calculation

Mining blocks with parent_timestamp+1 could increase the blocktime

-> Frontier Blocktime: ~17s

New formula fixes this issue (see EIP-2 for details)

Homestead Blocktime is now ~15s

EIP-7

DELEGATECALL

New Opcode

calls contract code in current contract execution

preserves CALLER and VALUE

Useful for libraries or mutable code

EIP-8

Changes to the base devp2p protocol

- Adds forward compatibility
- Not a change in the consensus layer

Light Client

Still not fully merged

But first transaction from a light client

Last merge was last week -> Progress

LES protocol now part of milestone for 1.5.0

ethereum Geth 1.4

Makefile for iOS / Android

Reversed Events

Sending transactions uses GPO by default

Push API for logs

personal.lockAccount

github.com/ahirner/ethereum