World Compensation System (WCS)

Keywords: #2020, #Blockchain, #InternetOfValue, #RSK, #DeFi, #DeFi-App, #DFApp, #wcsDFApp

Classification: DeFi : EcoSystem : @rif_os : Version: 0.0.1 (2020-01-15)

Status: in work

Purpose

Simple. Eliminate money invisibility.

User-story

I dare you to throw out all your money, all your papers and coins and individual national currencies, and start over.

Develop an international monetary system that is wide open, totally visible, immediately traceable, completely accountable. Establish a Worldwide Compensation System by which people would be given Credits for services rendered and products produced, and Debits for services used and products consumed.

Under the new Worldwide Compensation System, WCS, the transfer of Debits and Credits would be immediate and totally visible. That is, anybody and everybody could inspect the account of any other person or organization at any time. Nothing would be kept secret, nothing would be 'private'

Everything would be on the system of Credits and Debits. Returns on investments, inheritances, winnings of wagers, salaries and wages, tips and gratuities, everything. The WCS would deduct 10 percent of all earnings each year from the income of those voluntarily requesting such a deduction. Everyone in the society would be able to observe who was choosing to offer the 10 percent for the general good of all, and who was not. And everyone's records would be open to everyone else. And nothing could be purchased without Credits. There would be no other negotiable currency. ([source:#CWG, @realNealWealsh](http://ISBN))

Short-name: WCS, DeFiApp, wcsDFApp

Disclaimer: All quoted phrases are verbatim copies found at Conversations with God. Book Two (see Bibliography)

Bibliography: - Conversations with God (c) 1997 Neale Donald Walsch. ISBN 978 0 340 76544 9

Use-cases

• Typical Use-cases and User-workflow

Community

 $\bullet \quad [@WorldCompensationSystem\ (Twitter)] (https://twitter.com/WorldCompensationSystem)\\$

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Contributing

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Donations

```
BTC-Address: | 0x123..0000 |
```

Whitepaper

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```

```
../arch/dfs/dFSwcs - \# Distributed File-System WCS
```

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Platform

realisation platform - wcsOS Linux based. Minimal distribution

Transactions

homeland\$send 2 user1
Sending 2 Credits to /users/user1
TX: Send pubkey

RX: TX: RX:

Use-cases

Keywords: Socratic thinking, design thinking, Agile methodologies, user stories

Notation

The following code sections provide the main use-case description. First step during implementation consist of: 1. Copy Use-case description as /dst/test.expected 1. Replace old section and include new created file (/dst/test.expected) here instead 1. Implement required functionality 1. Implement test.sh 1. tool arg1

–arg-2 > test. result 1. diff test. result test.expected 1. Implement build.sh 1. build 1. /test. sh

Welcome home

** Welcome @homeland homeland\$

View use-case description manual help, man or check our documentation.

homeland\$man home whoami pwd ls <folder> ver homeland\$ver wcsOS 0.0.1

User management

homeland\$home

homeland\$user create user1 New wallet created Address: user1:0xc50...0000

File-System (Minimum commands)

Present working directory (pwd)

homeland\$pwd
/node/homeland --> {nodeuuid}

Listing files (ls)

homeland\$1s
local services
app1 -> /node/homeland/apps/app1
cmd1 -> /node/homeland/commands/cmd1
tool1 -> /node/homeland/tools/tool1
remote services
dapp1 -> /node/lapland/dapps/dapp1

local-users
me -> /users/me

remote-users

Applications, Services, Commands and Tools

Running local tool system-service

homeland\$stat connection OK O services running

Running local command system-service

homeland\$cmd1 --verbose running cmd1

Running local user-application

homeland\$app1 --verbose running app1@localhost (127.0.0.1)

Running remote user-application

```
homeland$dapp1 --verbose
running dapp1@lapland
address: 0xc5..000

no local credits (use command: credits)
no local debts (use command: debts)

use '$commands' for a listing of available operation commands
use '$apps' for a listing of currently available user-services
```

Commands

homeland\$commands
operations
credits - credits are gained by certain proof-of-work
debts - debts are credits debited to the users (to be payed later in time or as part of a loans - list of available loans (request for asset-transfer (value transfer)
offers - list of published offers (request for service)
assets - show local assets (including applications, commands, services, tools and monetary value

```
actions
debit -
loan -
value - set 'own' market-value (local cost of service-unit) -- analog to BTC-Network-Fee or
cost - update 'own' local (production) cost (fixed costs (including internet + electricity)
income - show current regular income
work - produce a work-product (costing local energy (computational power))
transactions
credit - credit user for consumed-service (online time + service computer power)
accept/service - accept offer
send - transfer asset to otheruser
reputation - get/set reputation-value (quadratic-voting) to given asset
Tools
homeland$tools
2 tools
telnet - (0 credit:government:culture)
ping - (1 credit:foundation:ibm)
telnet - (1 credit:institute:fraunhofer)
hash - (1 credit:university:berlin)
homeland$apps
                        ($ls /apps)
3 apps, 1 local
tetris - (16 times:company:gameco:*)
doomclone - (872355 times:user:girx34:****)
xyz - (4 times:local)
Local Services
Financial
homeland$wallet
Address: 0xc50..000
0 Credits
0 Debits
```

Value Operations

```
homeland$credits
0 credits
homeland$debts
0 debts
homeland$assets
2 assetts, 1 leasing, 1 licensed, 0 invested
tetris - (2 Leasing Credits left:16:company:gameco:*)
licensed
doomclone - (34 Credits licensed:872355:user:girx34:****)
invested 0
homeland$credit tetris
no neighbors found
Distributed Services
homeland$neighborhood
0 neighbors
homeland$discover
discovering users
34 neighbor users found
3 communities found
homeland$connect
connecting with local neighborhood
1. peer-to-peer connection established. Hello node34
2. peer-to-peer connection established. Hello
3. remote-connection established. Hello server78.google.com
OK service-connection established. Hello homequarters (@WCS00.org) time:34.251 ms
homeland$1s
local services
app1 -> /node/homeland/apps/app1
cmd1 -> /node/homeland/commands/cmd1
tool1 -> /node/homeland/tools/tool1
remote services
```

dapp1 -> /node/lapland/dapps/dapp1

```
local-users
me -> /users/me
neighborhood
user1 -> /neighborhood/nod35/user1
Group citizenship
homeland$1s nations
local-nation
nation1 -> /federation/ethereum/ethnation1
bitcoin -> /bitcoin/BTC
rsk -> /rif_os/rsk/Rootstock
homeland$citizen
connecting with local nation
1. remote-connection established. Hello finance.gov
2. remote-connection established. Hello congress.EU
{\tt OK \ service-connection \ established. \ Hello \ homequarters \ ({\tt OWCS00.org})}
0 taxes
2 messages
1 requests
10 offers
homeland$citizen federation1
connecting with local federation1
1. remote-connection established. Hello finance.gov
OK service-connection established. Hello homequarters (@WCS00.org)
0 taxes
2 messages
1 requests
Work – Get Idle Task (according to current citizenship)
homeland$idle federation1
scientific.phsychedelics (945 Users)
Donate
```

homeland\$donate -idle neighborhood

thank you

Contribute to Nation's taxes

homeland\$tax 8 contribute to local nation 8hrs full-time completed (8 Credits)

Value Creation (out-of-thin-air)

homeland\$offer -idle federation1
offering local idle-time for federation1
homeland\$offer 8
offering local-resources for 8hrs nation (default)
rejected (not enough resources)
homeland\$offer 6
offering local-resources for 6hrs nation (default)
accepted
completed. thank you (6 Credits granted)

Credits

homeland\$credits 6 Credits

Value Transfer - Request for service

homeland\$tetris
running tetris..
..
exiting tetris
homeland\$credits
4 Credits

Value Transfer - Investment

homeland\$invest kernel.org 2
2 Credits left
homeland\$assets --all
3 assets
borrowed/leasing
tetris - (0 Leasing Credits left:16:company:gameco:*)

```
licensed
doomclone - (34 Credits licensed:1564355:user:girx34:****)
invested
kernel - (2 Credits invested:0.0000 earned:6463872355:community:linux.org:*****)
membership
Communities
homeland$1s communities
communities
community1
homeland$greetings community1 me --verbose
$greetings community1 me{pubkey:address:nodeuuid:useralias:mail}
>>me:greetings community1
>>me:credentials me{pubkey:address:nodeuuid:useralias:mail}
>>community1:greetings me
>>community1:here our credentials
>>{
>> credentials: "community1{pubkey:address:nodeuuid:useralias:mail}"
>>}
homeland$offers
11 offers (1 miners)
homeland$accept 1
accepted top-priority offer (3 miners working in parallel)
completed (1 Credit granted)
homeland$credits
3 Credits
homeland$value dapp1
1 Credit
Running DApplication in debug-mode
homeland$dapp1 --verbose --debug
connection established (lapland @address: 0xc5..000:1234)
DEBUG: Exchange pubkey:me@homeland
DEBUG: 1 Debit Credit to me@homeland (-1 Debit Credit, 2 Remaining Credits in Total)
DEBUG: License key received (privatekey)
DEBUG: run dapp1@lapland using privatekey
```

```
running dapp1@lapland --key privatekey
...
exiting dapp1@lapland
DEBUG: 1 Credit granted to dapp1 (12463 in Total)
goodbye. connection closed (dapp1@lapland)
DEBUG: 2 Local Credits left (me@homeland)
```

User-management

```
homeland$login
homeland: me
Password: *** *
me@homeland$
```

User-Application development

DApplication development help

```
me@homeland$man app

json app(arg1, arg2){
  return json;
}

me@homeland$publish myapp1
{
  namespace : "me@homeland"
  name : "myapp1"
  return : "1"
}
```

Returning home

```
me@homeland$exit
homeland$
*** Welcome homeland
homeland$1s
local services
app1 -> /node/homeland/apps/app1
cmd1 -> /node/homeland/commands/cmd1
tool1 -> /node/homeland/tools/tool1
```

```
remote services
myapp1 -> /node/homeland/me:/myapp1
dapp1 -> /node/lapland/dapps/dapp1

local-users
me -> /users/me

neighborhood
user1 -> /neighborhood/nod35/user1 (light-consumer)
lapland -> /neighborhood/lapland/root (full-provider)

homeland$rate dapp1 ***
Awesome tool. Thank you!
homeland$SMS user1
Just tried '/homeland/dapp1' out. Is worth taking a look.
homeland$share dapp1 user1 2
Hey! Check '/homeland/dapp1' out. You are going to loooove it!
Timeout set to 2 hours
```

Lend User-service

homeland\$lend dapp1
offering dapp1 -> /node/lapland/dapps/dapp1
waiting for acceptance
accepted (node75)

Claim lend User-service

homeland\$claim dapp1
claming dapp1 -> /node/node75/dapps/dapp1
waiting for timeout
restored (homeland)
dapp1 -> /node/lapland/dapps/dapp1

Borrow service

Architecture

Concept

Create a World Compensation Ecosystem based on Decentralised Financial Applications.

Implementation: Operation System (including fs, dfs, time-shared applications)

wcsOS - linux based distribution

Layers: 1. Distributed peer-2-peer (P2P) Network (Blockchain based) 1. Distributed File system (dfsWcs) 1. Nodes are Servers 1. Servers 1. run System- and Users-services 1. route User- and System- interactions (transactions) 1. Users are Clients 1. Clients decide to participate or not (mounting/unmounting) as service suppliers in the network 1. Clients interact with other Clients 1. Clients request services from Servers (service suppliers) 1. Via Remote Procedure Call (RPC) returning values in JSON format 1. Clients transfer value-assets to single or multiple-users or services 1. Light-Clients connect and use the network only for short-time (SMS, PPP) 1. Value-assets are represented via Addresses in the Distributed File system 1. Clients and Servers interact via read/write file operations with eachother 1. Servers providing User-services are debted certain agreed amount per-use 1. Servers providing System-services are debted an agreed amount per-use, daily, monthly or yearly on donation basis

Network

Topology: Flower or Tree-of-Life (sacred geometry star 1:N, N:=6) * https://en.wikipedia.org/wiki/Overlapping_circles_grid#Modern_usage

Nodes:

Full-nodes: store the complete history of command-blocks (analog to batch-files (a.k.a trans-Light-nodes: store, validate and reconstruct environment from all nodes in local network (on

Local File-system

```
RK1.0
/ - WCS root Ecosystem
/commands
/dbin/ - Decentralised System services
/users/ - connected user addresses {publickey:addresshash:alias:inbox} (analog to /mnt)

RK1.1
/apps
/lang - implementation language specific files
```

```
/tools - Utility tools

RK1.2
/dapp/ - Decentralised User or Third-Party Applications (executable -- analog to /usr/bin)
```

Remote (distributed) File-system

```
/arch/dfs
RK2
/dapp/DeFi/ - Decentralised Financial Apps
```

Realisation

TCP/IP Server :port UNIX's "Everything is a File" -> (name:Address) - Network (distributed) File-System

Support Tools

neo4.js - Graph Database

Common Use-cases

• transfer value-assets

Network Startup

```
$wcsStart &
World Compensation System server (wcss) running
Listening on port:280182
```

\$wcsStatus Status: OK

Command, Services and Tools

```
mount - loads/unloads foreign WCS Networks
ls - show current Users in the Ecosystem
mv - allocate users in different sub-network
whoami -
ps - process
ping - ping
```

```
mailto - use mail-alies to transfer transfer value-assets in the network
Application Notes
$whoami
{0x123456:mstcroix:mstcroix@protonmail.com}
$pwd
$ls
/apps
/commands
/dapps
/services
/users
$1s /users
/users/{0x123456:mstcroix:mstcroix@protonmail.com}
/users/{0x423456:mstcroix:none}
/users/{0x223456:anonymous:none}
/users/{0x723456:mstcroix:mstcroix@protonmail.com}
$ps
O applications running
$/apps/App1 &
/apps/App1 running. 5 users connected
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```

telnet - establish connection and echo server

b85f6f905757b8a0d3f75430e13c47ad 4e57eedfde6cb02c52aec8be79b015c9 94063115eb82858ccfd15ef5a3b21814 68f05ceb68281268217108fb55876082 5cd4aa50a1a9f8d1b46b0b63c9d82e27 9c060f1741bc37163838ead55b73c8ab f16bab90fe5bf837c86b04e89f7dbb86 2eaaf2bbe0e2dae25cbc17345d4ba75a 5fe7603d97b3315406ce7c051f273a3e b6a84991d4f8957e69ccfd6d3e935e02 50fc328aad939c00fb848432a94943c9 4ae120d33503361b35768677302e8c75 1c309bf14fbd49d5afcfac8da0635b5b 41990a8f6b22e6e1b72009ca47b6ffc7 15fd8a06e94ecf5f079451536356171c a3c6c1e9fbc0dd9e6723f73f7402b08a 06ae6a9d35733170f372c50e1e6ed749

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