

# 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

- [[@WorldCompensationSystem \(Twitter\)](https://twitter.com/WorldCompensationSystem)](https://twitter.com/WorldCompensationSystem)

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## Donations

BTC-Address: | 0x123..0000 |

# Whitepaper

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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 implemenation 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$ls
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  
0 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 loan)

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\$app\$ (\$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

```
leasing
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$ls
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$ls 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
OK service-connection established. Hello headquarters (@WCS00.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 headquarters (@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$ls 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$ls
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
claiming 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](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 transactions))  
 Light-nodes: store, validate and reconstruct environment from all nodes in local network (or from other nodes)

## 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

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

```
$wcssStatus  
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  
telnet - establish connection and echo server  
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

$ls /users
/users/{0x123456:mstcroix:mstcroix@protonmail.com}
/users/{0x423456:mstcroix:none}
/users/{0x223456:anonymous:none}
/users/{0x723456:mstcroix:mstcroix@protonmail.com}

$ps
0 applications running

$/apps/App1 &
$ps
/apps/App1 running. 5 users connected

50fc328aad939c00fb848432a94943c9 ../arch/README.md 81e0e5243dd33bd4948feb21539b7631
README.md d3777eb628218cf79d50e576d5c95bbd customer.md ca8f6611e7334b5878a412f6908fab36
platform.md 481ff52c1fbf89a439c00b67399cc38e wcsOES.md 70a1947487f1741ee64cb109b8cddc82
whitepaper.md ## 2020 (CC) Creative Common License 481ff52c1fbf89a439c00b67399cc38e
wcsOES.md published by: user : Sat Jan 18 16:22:38 CET 2020

bc9b4920af19ea249c5e51730a986a9a ../tools/README.md
f92f6755c1f6c83858630cb4d4c419aa ../networking/README.md
3582056e21f163e556a92a29f26da4bc ../GLOSSARY.md
1d4ba0b4f97b65cb239ac157fa453df6 ../dapps/README.md
ca8f6611e7334b5878a412f6908fab36 ../whitepaper/platform.md
481ff52c1fbf89a439c00b67399cc38e ../whitepaper/wcsOES.md
d3777eb628218cf79d50e576d5c95bbd ../whitepaper/customer.md
69d6e6999cfd2de3af3de780a4cbf5a0 ../whitepaper/README.md
70a1947487f1741ee64cb109b8cddc82 ../whitepaper/whitepaper.md
b85f6f905757b8a0d3f75430e13c47ad ../operations/README.md
4e57eedfde6cb02c52aec8be79b015c9 ../README.md
94063115eb82858ccfd15ef5a3b21814 ../project/integration.md
68f05ceb68281268217108fb55876082 ../project/deployment.md
5cd4aa50a1a9f8d1b46b0b63c9d82e27 ../project/CONTRIBUTING.md
9c060f1741bc37163838ead55b73c8ab ../project/workproducts.md
68b329da9893e34099c7d8ad5cb9c940 ../lang/README.md
2cd6ee2c70b0bde53f6e6cac3c8b8bb1 ../lang/c/README.md
5fe7603d97b3315406ce7c051f273a3e ../arch/dfs/README.md
b6a84991d4f8957e69ccfd6d3e935e02 ../arch/dfs/DFSwcs/README.md

```



```
50fc328aad939c00fb848432a94943c9 ../arch/README.md
4ae120d33503361b35768677302e8c75 ../arch/fs/README.md
1c309bf14fbd49d5afcfac8da0635b5b ../users/README.md
41990a8f6b22e6e1b72009ca47b6ffc7 ../commands/README.md
15fd8a06e94ecf5f079451536356171c ../apps/README.md
a3c6c1e9fbc0dd9e6723f73f7402b08a ../services/wcsServer/README.md
06ae6a9d35733170f372c50e1e6ed749 ../services/README.md
```