

The roles of FORTH in blockchain technologies and beyond

We investigate the roles of FORTH in Blockchain related technologies and novel decentralised schemes beyond Blockchain, with the potential of reinventing the Internet, but without the huge footprint required by Blockchain.

Liang Ng, October 2025
omnixtar.github.io/svfig

Overview

Introduction (5 min)

Fundamentals (3 min)

What can CMP & FORTH do?

- From Web-based Omni*Web to FORTH Triple-less Card Computer (TCC)
- Artificial Intelligence & Beyond?
- (4 min)

Phoscript-Linux/C-FORTH Sandwich Model (5 min)

Conclusions (3 min)

Outline

MMAGA 2024 Revenues USD 1.8 trillion

Separation of Disclosure & Royalties (SDR)

Hash as Proof of Intent

***Triple-less Card Computer
(Domain-Kernel-Database-less)***

Phoscript -Linux/C-FORTH Sandwich Model

Decentralised Social Media

Trispecies Monetary Payment
(Crypto, Fiat, Bullion)

Crypto-Metaprogramming

Omni*Web

Omnihash & DJSON Decentralised JSON

Hilbert Hotel & Infinity Cabinet

Isaac Asimov's Foundation & Metanarchy

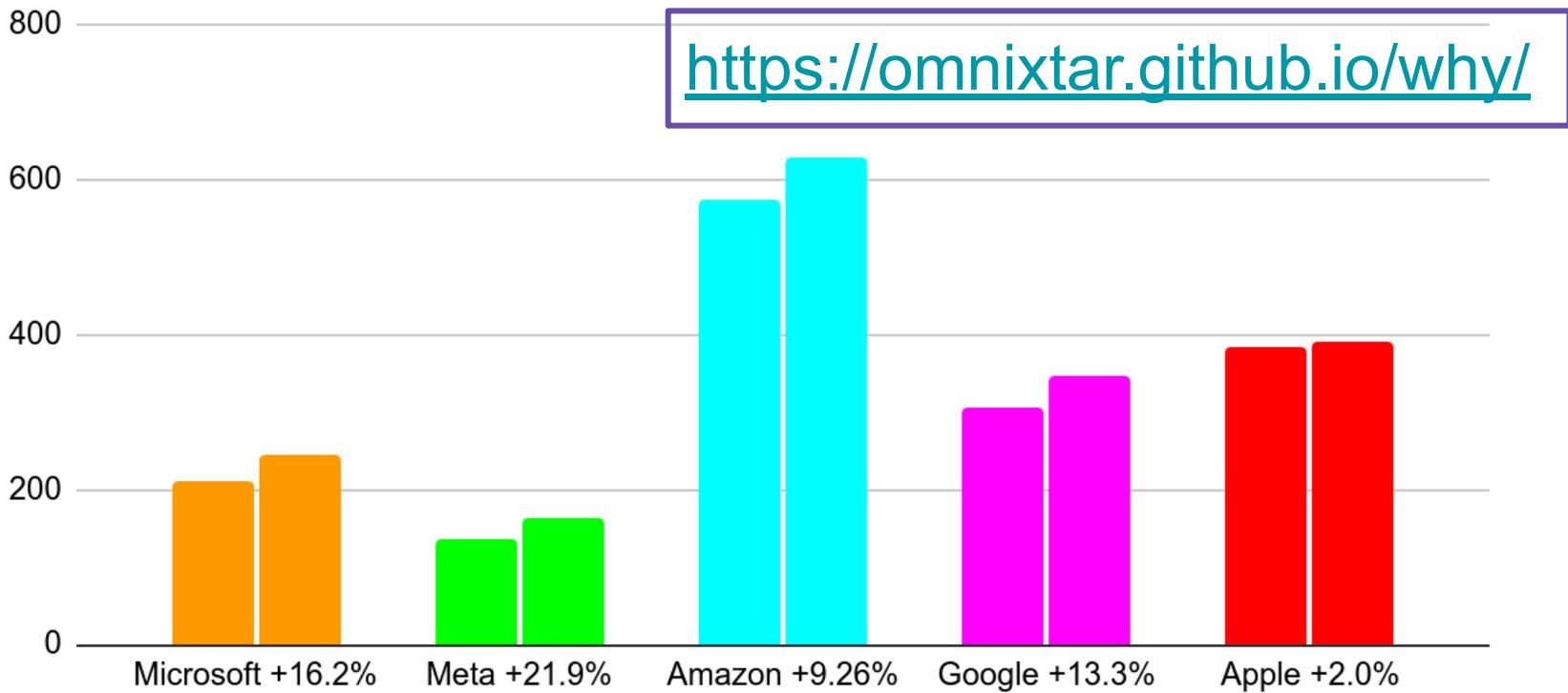
French Revolution, Ownership of Property
& Decentralised Digital Assets

Hash as Pointer & Mask, encrypt hash with
PBK

Chained Hash Properties
(String & Function)

MMAGA Revenues 2023/24 (USD billions)

Total 2024: USD 1.776 Trillion (+10.27%)



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Omni*Contract: Ownership & Rights of Use of Digital Asset (Source Code)

Like

- On the Separation of Disclosure and Royalties of the Source Code July 21, 2024
1. You, a human agent of a company or government agency, may read the source code without making payments to the author or authors, but if you execute this program on our behalf, we reserve the rights to claim royalties from you or your organization.
 2. Your copy of source code shall be attached with at least one Agent and your own Omnihash, to authorise you the right to use the source code. You shall pay maximum penalties allowed by a legal court of law for deploying the source code pertaining to clause (1).

MMAGA 2024 Revenues USD 1.8 trillion

Separation of Disclosure & Royalties (SDR)

s, we

Omni*

you

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Chained Hash Properties (String & Function)

DJSON Decentralised JSON is a JSON object or its encoded string where at least one of the fields is an Omnihash, representing the owner of this JSON object.

- ```
["2025-02-11T14:25:28.207+0000", "like", "CXAGcRKevA==", "CXAGcRKevA==", "HymWBzfj9A==",
{"repo":"https://github.com/omnixtar/omnixtar.github.io/", "contract":"https://omnixtar.github.io/
contract/", "ghh":"https://github.com/omnixtar/omnixtar.github.io/
commit/19bb258190d57d6246840bf8ccc8957ae880e341", "datetime":"2025-10-24T04:41:21.000Z" }]
```



*(Pop Quiz: Tron MCP vs.  
CMP?) Decentralisation?*

## Hilbert Hotel & Infinity Cabinet

Hilbert Hotel (1924)

Turing machine (1936)

Room number is a hash number.

Each room has a cabinet with infinite number of drawers.

Drawers are identified by a hash number, derived from the contents of documents in the drawer.

### Chained Hash Properties:

1. Concatenation of strings
2. Concatenation of hash functions

Discovered not Designed: Mathematical properties are discovered, by algorithms designed by programmers.

Recursive structures: Containing substructures – [hotel, rooms, cabinets, files, documents, texts] shown in JSON and DJSON.

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<https://youtu.be/mYjKS0KiJVg?t=455>

3 4 +  
Phoscript  
Metashell

1

Inverse Shunting  
Yard Algorithm  
(ISYA)

Infix: 3 + 4  
C, C++, PHP, Python  
Java, JavaScript

Sandwich API  
Model

(internal operations  
of compilers,  
interpreters)

2

Shunting Yard  
Algorithm (SYA)



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We demonstrate how management of digital assets such as texts, photos and videos can be decentralised using Decentralised JSON, a JSON object where one or more of its elements are hashcodes.

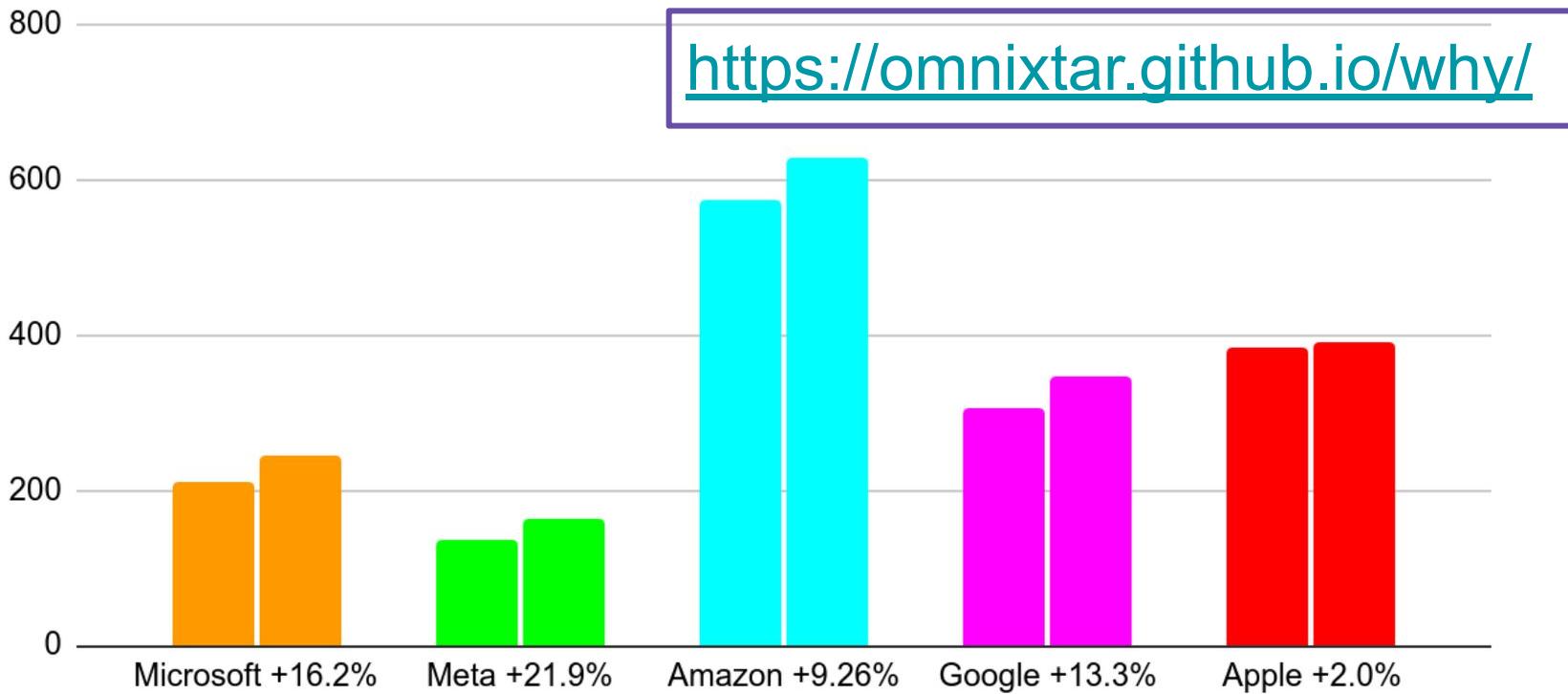
Next we show how DJSON removes the necessity of database servers, making it possible to construct a “Triple-less” computing system, namely without domain name system, operating system and database server: Domainless, Kernel-less, Database-less.

FORTH is the natural candidate for the Triple-less computing system, a prototype being card size electronic wallet, where Trispecies monetary transactions, namely fiat money, cryptocurrency and bullion, can be carried out, laying the foundation (Asimov's pun!) for a post-Blockchain global financial framework and **Metanarchy – global governance based on decentralised transactions in the Metaverse**.

a.k.a. ***TRILLION Dollar Solution?***

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Conclusions (3 min)

# Crypto-Metaprogramming (CMP)

Bitcoin FORTH example

Hash of Public Key, as Decentralised User Identifier

Basic explanation: Phoscript interpreter loop

How Omni\*Web CMP is similar or different from Bitcoin FORTH?

**Bitcoin: Technical Concepts**

Bech32

Blockchain Diagram

Bitcoin Encryption

Creating forks

Bitcoin mining

Blockchain

Bitcoin Improvement Proposals

Pay-to-Script Hash

Proof of Keys

UTXO

User Activated Soft Fork

OmniBOLT

Blockchain (database)

Segregated Witness

Lightning Network

Hashed Timelock Contracts

NSequence

Bitcoin Emission

Block timestamp

**Pay-to-PubKey-Hash (Pay-to-Public-Key-Hash, P2PKH)** is the basic form of making a transaction and is the most common form of transaction on the [Bitcoin network](#). Transactions that pay to a [Bitcoin address](#) contain P2PKH scripts that are resolved by sending the public key and a digital signature created by the corresponding [private key](#).

The ScriptPubKey and ScriptSig for a transaction is shown below:

**Table of Contents**

1. Pay-to-Pubkey Hash
  - 1.1. Pay-to-PubKey-Hash Review
  - 1.2. Pay-to-PublicKey Hash Example
  - 1.3. See also
  - 1.4. References

<https://bitcoinwiki.org/wiki/pay-to-pubkey-hash>

## Pay-to-PubKey-Hash Review

Two types of payment are referred as P2PK (pay to public key) and P2PKH (pay to public key hash).

Satoshi later decided to use P2PKH instead of P2PK for two reasons:

Elliptic Curve [Cryptography](#) (the cryptography used by your public key and [private key](#)) is vulnerable to a modified Shor's [algorithm](#) for solving the discrete logarithm problem on elliptic curves. In plain English, it means that in the future a quantum computer might be able to retrieve a private key from a public key. By publishing the public key only when the coins are spent (and assuming that addresses are not reused), such attack is rendered ineffective.

With the hash being smaller (20 bytes) it is easier to print and easier to embed into small storage mediums like



works  
Softfork  
Scalability  
Adaptive difficulty  
CVE-2012-4684-new

CVE-2013-2293

Nanopayments

Block weight

BIP UNOFFICIAL DRAFT 0

Ideal Properties of Digital Commodities

Address reuse

Hashlock

Contingency plans

Offline transactions

Off-Chain Transactions

Funding network security

Bitcoin scalability problem

Segwit support

CVE-2012-3789

Proof of Ownership

Dump format

Test Cases

Hot wallet

Dominant Assurance Contracts

Bitcoin Binary Data Protocol

Coin analogy

CVE-2012-4683

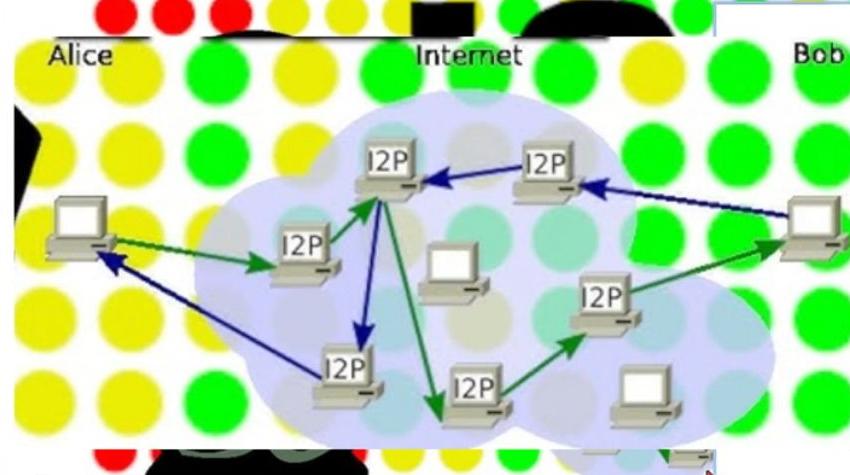
BIP Draft – Instant Partial

A [Bitcoin address](#) is only a hash, so the sender can't provide a full public key in scriptPubKey. When redeeming coins that have been sent to a [Bitcoin address](#), the recipient provides both the signature and the public key. The [script](#) verifies that the provided public key does [hash](#) to the hash in scriptPubKey, and then it also checks the signature against the public key.

Checking process:

| Stack                                  | Script                                                                   | Description                                          |
|----------------------------------------|--------------------------------------------------------------------------|------------------------------------------------------|
| Empty.                                 | <sig> <pubKey> OP_DUP OP_HASH160 <pubKeyHash> OP_EQUALVERIFY OP_CHECKSIG | scriptSig and scriptPubKey are combined.             |
| <sig> <pubKey>                         | OP_DUP OP_HASH160 <pubKeyHash> OP_EQUALVERIFY OP_CHECKSIG                | Constants are added to the stack.                    |
| <sig> <pubKey> <pubKey>                | OP_HASH160 <pubKeyHash> OP_EQUALVERIFY OP_CHECKSIG                       | Top stack item is duplicated.                        |
| <sig> <pubKey> <pubHashA>              | <pubKeyHash> OP_EQUALVERIFY OP_CHECKSIG                                  | Top stack item is hashed.                            |
| <sig> <pubKey> <pubHashA> <pubKeyHash> | OP_EQUALVERIFY OP_CHECKSIG                                               | Constant added.                                      |
| <sig> <pubKey>                         | OP_CHECKSIG                                                              | Equality is checked between the top two stack items. |
| true                                   | Empty.                                                                   | Signature is checked for top two stack items.        |

# INVISIBLE INTERNET PROJECT



ni\*Web

网

[https://www.youtube.com/watch?v=-3CO5bG\\_q8&t=56s](https://www.youtube.com/watch?v=-3CO5bG_q8&t=56s)



Omni\*Web

Training

Taichi-

Metaprogramming  
Fire

Infrastructure  
Earth

Digital Assets  
Water

地

<https://omnixtar.github.io/oxw>

Omni\*Web: Set Up YrOwn GLOBALLY ACCESSIBLE Web Server w/o Domain Name System in 4 Simple Steps (I2P)



M4 Metaprogramming in Forth  
56 subscribers



ONCE YOU UNWRAP,  
YOU CAN'T GO BACK



Activities Firefox

Sel 11 Feb, 22:07

us zh

yo6sgmfq7pfvvp2e4kcuhtfg7wfltt63igwcukhbmum6lu3a3a.b32.i2p/oxm/oxm.php?nn=adam

170%

adam session\_id:adam-fer4f9qk69m9nj562u7kj5n2u9\_31

session\_id:adam-fer4f9qk69m9nj562u7kj5n2u9\_31

Omni\*Search Demo

Copy the following code and execute it in

f(': B\_F '+ JSON.stringify({w:'like', t:'recipi

1602 Phos 1611 S 1621 B\_F start omni:

fgl\_s 340 &lt; 2 &gt; array ( 0 =&gt; array ( 0 =&gt;

'Icdw:', 5 =&gt; 'B\_AUTH', ), 1 =&gt; NULL, )

arr

imfq7pfvvp2e4kcuhtfg7wfltt63igwcukhbmum6lu3a3a.b32.i2p

```
post ajax:
fgl_s 340 < 2 > array (0 => array (0 => '{"B_AUTH":'
 ["SESSION", "AUTH", "t", "s", ""]), 1 => 'j', 2 => 'cdw', 3 => 'am', 4 =>
 'lcdw', 5 => 'B_AUTH',), 1 => array ('SP' => '93b164de', 'PASS' =>
 '20250211_220742', 'PBK' =>
 'LS0tLS1CRUdjTiBVVUJMSUMgS0VZLS0tLS0KTULQ0lQ0USCZ2txaGt
 pRz3MEJBUUVGQUFPQ0FnOEFSNIDQ2dLQ0nRuFyUlR1TWJCL3NS
 c2XMMnSeghOUDILWkNVRkJkdER5VXV1b3zsC9XT05nYU1QWExG
 NHVwZFNUTHU0QXhWNLUtkUnFBTWlMrz2ZTZkajBqcEEz3MvQlVNd
 Op3VW1Jd1EyymtFL0NsZFdscDcweExVVXNnQuI2oVNGOTRCGpmW
 EZMODVJL2aa1NsemSRWHRsZnQVYzTGTgYMDFyelB3OGldEl1Z2R
 vNHb5anBLvZNu5095SlAwZ2Nrck0dWJCSG1H5jlqOWSYeXraSzrUU
 V4hdSt3701RwEbQR28wH2UEP3-akbTSv4tIwdlhuhz7Kylknivm8vT17cfTU
```

DSC

cmd

123

1. Discovered by accident, PBK login video, show again.
2. DJSON video [https://youtu.be/\\_w-E4Z4Ju5s?t=250](https://youtu.be/_w-E4Z4Ju5s?t=250)

Login using Hash of public key.

'Graph/dmeta/CXAGCkRKeVA==', ) [ "a\_cn", "r": "Graph/dmeta/CXAGCkRKeVA==", "t": "

Don't allow  
 yo6sgmfq7pfvvp2e4kcuhtfg7wfltt63igwcukhbmum6lu3a3a.b32.i2p  
 to prompt you again

OK

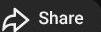
SEND

GET

**DJSON: Decentralised JSON -- ULTIMATE generalisation of Bitcoin address and blockchain, w/o MINING.**



M4 Metaprogramming in Forth  
56 subscribers



All

For you



The A.I. Stock Bubble |  
ChatGPT, Grok, Go Eropic |



yo6sgmfq7pfvpv2e4kcuhtfg X yo6sgmfq7pfvpv2e4kcuhtfg X +

https://yo6sgmfq7pfvpv2e4kcuhtfg7wfllt63igwcuuhbmum6lu3a3a.b32.i2p/oxm/oxm.php?nn=adam

170%



adam session\_id:adam-fer4f9qk69m9nj562u7kj5n2u9\_31  
session\_id:adam-fer4f9qk69m9nj562u7kj5n2u9\_31

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Copy the following code and execute it in

f(): B\_F + JSON.stringify({w:'like', t:'recipi

1602 Phos 1611 S 1621 B\_F start omni:

fgl\_s 340 < 2 > array ( 0 => array ( 0 => '{  
'lcdw:', 5 => 'B\_AUTH', ), 1 => array ( 'SP'  
'LS0tLS1CRUdJTiBQVUJMSUMgS0VZLS  
'NN' => 'adam', ), )

fgl\_s 340 < 4 > array ( 0 => array ( 0 => '{  
["SESSION:", "AUTH", "i:", "PBK", "i:", "o\_has":  
1 => 'jd:', 2 => 'cdw:', 3 => 'am:', 4 => 'lcdw:  
array ( 'a\_cmd' => array ( 0 => 's:', 1 => ';' )  
'Graph/dmeta/CXAGcRKevA==', ) [ "a\_cm

{ "r": "Graph/dmeta/CXAGcRKevA==", "t": "  
fgl\_s 340 < 2 > array ( 0 => array ( 0 => '{  
'lcdw:', 5 => 'B\_AUTH', ), 1 => NULL, )

fgl\_s 340 < 2 > array ( 0 => array ( 0 => '{  
"B\_AUTH": ["SESSION:", "AUTH", "i:", "o\_has:",  
"jd:", "cdw:", "am:", "lcdw:" ], 5 => 'B\_AUTH'  
) 1 => array ( 'SP' => 'e3235b7f', 'PASS' =>  
'20250211\_220742', 'PBK' =>

⊕ yo6sgmfq7pfvpv2e4kcuhtfg7wfllt63igwcuuhbmum6lu3a3a.b32.i2p

post ajax:  
fgl\_s 340 < 2 > array ( 0 => array ( 0 => '{  
"B\_AUTH":  
["SESSION:", "AUTH", "i:", "o\_has:",  
"jd:", "cdw:", "am:", "lcdw:" ], 5 => 'B\_AUTH'  
) 1 => array ( 'SP' => '93b164de', 'PASS' =>

'20250211\_220742', 'PBK' =>  
'LS0tLS1CRUdJTiBQVUJMSUMgS0VZLS0tLS0tKU1JQ0lqQU5CZ2txaGt  
pRzI3MEJBUVUGQUFQ0FnOEFSN1DQ2dLQ0FnRUFyUlR1TWJCL3NS  
c2dXmNSeGhOUDILWkNVRkJkdERS5VX1b3oZSC9XT05nYU1QWExG  
NHVwZFNUTHU0QXhWNutkUnFBTwIMRzI2ZTZhBqczEzS3MvQlVNd  
0p3VW1Jd1EyYmtFL0NsZFdsDCweExVVXNnQuI20VNGOTRCGpmW  
EZMODVJL2Vaa1NSem5RWHRsZnQVYzzJTG4yMDFyeIb3OGl0dEl1Z2R  
vNHBSanBLVzNuS095SlAwZ2Nrck0dWJCSG1HSjlqOW5YeXZraSszUU  
V4b5t30JRWfhOR28yaH2UFR3akhTSVUvdjhwbzKZhkpIVm8vTlZrtU  
9vK2tStkl5ZW1manpyYTFEnzdzyZDMrZjMveER4bGQraTg2K3dyRlkN  
WZlCDQzOElpK0pZMktLwNxzd1hxavZ5eGirTU1ENUJpNDNmTnBi50Js  
ZXJBZYU5pY2pRTGhUZVE1Vlk0d2pUczNMZVMxaytLRRhBZQVNROSTz  
ElsVWVaSjVNVDhtMnBodGtM0V4WHAYoJtZml2ZmxPRXRrdmdaZ  
m1OQzJPbUcyXNYZ3pWL05qZk5kakdZ2Zwp0vU0YKZ6WFdZKzNRQ  
3o4UGxpBUZzeWtJZlloebVMNzQ5MW9tVmZjeUfUzBwB1hqt1Vnbl  
NsduxPMFBxRk5oODdyTwpvczJYYTg4THpmQmh1UFJIN2pwVxd1Y0  
pvbG1GU3ZlYUHd1NjNW1NWnl1ZUZvMuJlV3UxWlhuK1pzRzhEekdM  
R3lCc19XYkuNvo1NktuZzdYVbzBMDRGTlxNWE1VG95VVNDbi9ua1  
dYUkpe6UhRcGFwQUtmgVNPeKFDUEvtak9GYNzEQWNkbGMrWVpBK  
0U1bXVBYVmTnNpCvQWn3pzNkt0Qk9rbWRTNVJMXVvOENBd0VB  
QVE9PQotLS0tLUVORCBQVUJMSUMgS0VZLS0tLS0=, 'NN' => 'adam',  
)

Don't allow

yo6sgmfq7pfvpv2e4kcuhtfg7wfllt63igwcuuhbmum6lu3a3a.b32.i2p  
to prompt you again

OK

SEND

GET

DSC

cmd

123

Encrypted\_Message

Any\_other\_remarks

Misc

Activities Firefox Sel 11 Feb, 22:07 zh

yo6sgmfq7pfvp2e4kcuhtf X yo6sgmfq7pfvp2e4kcuhtf X + https://yo6sgmfq7pfvp2e4kcuhtf7wfllt63lgwcukhbmum6lu3a3a.b32.i2p/oxm/oxm.php?nn=adam 170% ☆

adam session\_id:adam-fer4f9qk69m9nj562u7kj5n2u9\_31  
session\_id:adam-fer4f9qk69m9nj562u7kj5n2u9\_31

Omni\*Search Demo

Copy the following code and execute it in the browser console:

```
f(): B_F +' JSON.stringify({w:'like', t:'recipient_hash', f:'sender_hash'}) +' jd: rghc: g_
```

1602 Phos 1611 S 1621 B\_F start omni:  
fgl\_s 340 < 2 > array ( 0 => array ( 0 => {'B\_AUTH':["SESSION:", "AUTH", "i:", "s:", 'lcdw:', 5 => 'B\_AUTH', ], 1 => array ( 'SP' => '9fa64665', 'PASS' => '20250210\_00:LS0tLS1CRUdJTiBQVUJMSUMgS0VZLS0tLS0KTUIJQ0IqQU15C72txaGtnRzI3MF' 'NN' => 'adam', ), )  
fgl\_s 340 < 4 > array ( 0 => array ( 0 => {'B\_AUTH1': ["SESSION:", "AUTH", "i:", "PBK", "i:", "o\_hash.json", "l\_cdwjs", "t\_f0": "2025-02-10T00:38:00", "r": "Graph/dmeta/CXAGcRKevA==", } [ {"a\_cmd": ["s:", ";"], "t\_f0": "2025-02-10T00:38:00", "r": "Graph/dmeta/CXAGcRKevA==", "t": "2025-02-10T00:38:00"} ]  
fgl\_s 340 < 2 > array ( 0 => array ( 0 => {'B\_AUTH':["SESSION:", "AUTH", "i:", "s:", 'lcdw:', 5 => 'B\_AUTH', ], 1 => NULL, )  
fgl\_s 340 < 2 > array ( 0 => array ( 0 => {'B\_AUTH':["SESSION:", "AUTH", "i:", "s:", 'lcdw:', 5 => 'B\_AUTH', ], 1 => array ( 'SP' => 'e3235b7f', 'PASS' => '20250210\_0437341', 'PBK' =>

DSC

cmd

123

Encrypted\_Message

Any\_other\_remarks

Misc

adam

s: x:

AUTH GenKeys SEND GET

Front End

Back End

PBK (Public Key)

PBK (Public Key)

+

Secret Phrase (SP)

Ciphertext

Ciphertext

+

PVK (Private Key)

Secret Phrase (SP)

Secret Phrase (SP)

"req\_auth\_sc":["b64d:", "4", "orpb:", "hex:", "dup2:", "rsa:", "2", "pick:", "lkey:", "swap:", "r  
ecr:", "b64e:", "ON", "ECHO", "bv:", "ec:", "2", "pick:", "SP", "ka:", "AUTH", "uss:", ":"]

```
i:", "dts:", "over:", "over:", "jsp:", "rot:", "rot:", "swap:", " ", "jsd:", "=chat", "dc0:", " ", "jsd:", "rot:", "rot:", "jsp:", "jnl:", "swap:", "log", "\/", "jsd:", "wa:", ";"], "nick": ["NN", "ka:", "AUTH", "uss:", ";"], "req_auth_sc": ["b64d:", "4", "orpb:", "hex:", "dup2:", "rsa:", "2", "pick:", "lkey:", "swap:", "recr:", "b64e:", "ON", "ECHO", "bv:", "ec:", "2", "pick:", "SP", "ka:", "AUTH", "uss:", ";"], "b_cdw": [= _\Backup\o_cdw.json\/, "dw.json", "3", "mssx:", "o_cdw.json", "s:", "copy:", ";";], "s_ss": ["SESSION:", "s:", ";"], "uu_ls": [.\Graph\, "swap:", "2", "mssx:", "mkdir:", ";"], "a_cache": ["Web:", "0", "i:", "\/", "explode:", "apop:", "cache", "apush:", "rgrep:", "\body\/", "ig:", "\div\/", "ig:", "\hwindow\/", "ig:", "av:", ";"], "a_keyword": ["UUID", "swref\/", "ig:", "\src\/", "ig:", "\width\/", "ig:", "\"], 553 function fgl_lkey() 554 { 555 global $S; 556 $keystr = array_pop($S); 557 $key = end($S); 558 $key->loadKey($keystr); 559 } 560 function fgl_recr() 561 { 562 global $S; 563 $str = array_pop($S); 564 $key = end($S); 565 $key->setHash('sha256'); 566 $key->setMGFHash('sha256'); 567 $S[] = $key->encrypt($str); 568 }
```

Open



libfgl.php  
/var/www/dmeta/o/auth

Save

```
1268 }
1269 }
1270 }
1271 }
1272
1273 function FGL($a)
1274 {
1275 global $argv, $S, $SS, $xk, $xs, $SC, $SL, $CDW, $BV;
1276 $a = preg_replace('/\s+/', ' ', $a);
1277 $a = explode(' ', trim($a));
1278 $SS[] = array(0, $a);
1279 if (isset($D)) {
1280 echo "\n\n" . __FUNCTION__ . " " . __LINE__ . " " . var_src($SS);
1281 }
1282 $xc = count($SS);
1283 $xk =& $SS[$xc - 1][0];
1284 $xs =& $SS[$xc - 1][1];
1285 $xl = count($SS[$xc - 1][1]);
1286 $vk = $xk;
1287 $Z = $xl;
1288 if (isset($D)) {
1289 echo "\n" . __FUNCTION__ . " start " . __LINE__ . " vk " . $vk . " Z " . $Z . " SS " .
var_src($SS) . "\n";
1290 $S[] = $vk;
1291 }
```

Open



Save



libfgl.php  
/var/www/dmeta/o/auth

```
var_src($SS) . "\n";
 $S[] = $vk;
 $t = array_pop($S);
 $CC = $t[0];
}
do {
 // 20230609 Exception handling / errors etc.
 if (gettype(end($S))=="string") {
 if (substr(end($S),0,9)=="__ERROR__") { // exit; // break;
 echo "\n\n FGL :post ".array_search(":post", $S[0])." ".var_src($BV)." ".var_src(
$SS)."\n";
 // exit; // break;
 // array_pop($SS);
 /*
 $xk=array_search(":post", $S[0])+1;

 $xc = count($SS);
 // $xk =& $SS[$xc - 1][0];
 $xs =& $SS[$xc - 1][1];
 $xl = count($SS[$xc - 1][1]);
 $vk = $xk;
 */
 echo " ERROR xl ".$xl." xk ".$xk." xs ".var_src($xs)." SS ".var_src($SS);
 }
 }
}
```

Open



c\_pk.pem x

d\_pk.pem x

rsa.sh x

libphos.js x

e\_pk.pem x

donald\_keypair.js x

libphos.php x

init.js x

libfgl.php x

libui.php x

alias.php x

gui\_dsc.js x

1360

```
 } } while (1),
1361 } else {
1362 if ($v[$l - 1] == ":") {
1363 $l = strlen($v);
1364 $fn = substr($v, 0, $l - 1);
1365 if (function_exists("fgl_" . $fn)) {
1366 if (isset($D)) {
1367 echo " xs: line " . __LINE__ . " fgl_" . $fn . " ";
1368 }
1369 }
1370
1371 // if (gettype(end($S))=="string") if (substr(end($S),0,9)=="_ERROR_") { // exit;
1372 /*
1373 if (gettype(end($S))=="string") if (substr(end($S),0,6)=="==POST") { // exit;
1374 echo "\n xs: " . __LINE__ . " ";
1375 echo " v " . $v . " length " . strlen($v) . " ord " . ord($v) . " vk " . $vk . " " .
1376 var_src($xs);
1377 exit;
1378 }
1379 call_user_func("fgl_" . $fn);
1380
1381 if (gettype(end($S))=="string") if (substr(end($S),0,9)=="_ERROR_") { // exit;
1382 }
1383 }
```

```
1272
1273 function FGL($a)
1274 {
1275 global $argv, $S, $SS, $xk, $xs, $SC, $SL, $CDW, $BV;
1276 $a = preg_replace('/\s+/', ' ', $a);
1277 $a = explode(' ', trim($a));
1278 $SS[] = array(0, $a);
1279 }
1290 do {
1291
1292 // 20230609 Exception handling / errors etc.
1293 if (gettype(end($S))=="string") {
1294 if (substr(end($S),0,9)=="__ERROR__") { // exit; // break;
1295
1296 call_user_func("fgl_" . $fn);
1297
1298 } else {
1299 if ($v == '====') {
1300 $S[] = array_pop($S) === array_pop($S);
1301 } else {
1302 $S[] = $v;
1303 }
1304 }
1305 }
1306 } while ($vk < $xl); // LOL $xk++ but $vk is not?
1307
1308 array_pop($SS);
1309
1310 }
```

# Overview

Introduction (5 min)

Fundamentals (3 min)

What can CMP & FORTH do?

- From Web-based Omni\*Web to FORTH Triple-less Card Computer (TCC)
- Artificial Intelligence & Beyond?
- (4 min)

Phoscript-Linux/C-FORTH Sandwich Model (5 min)

Conclusions (3 min)

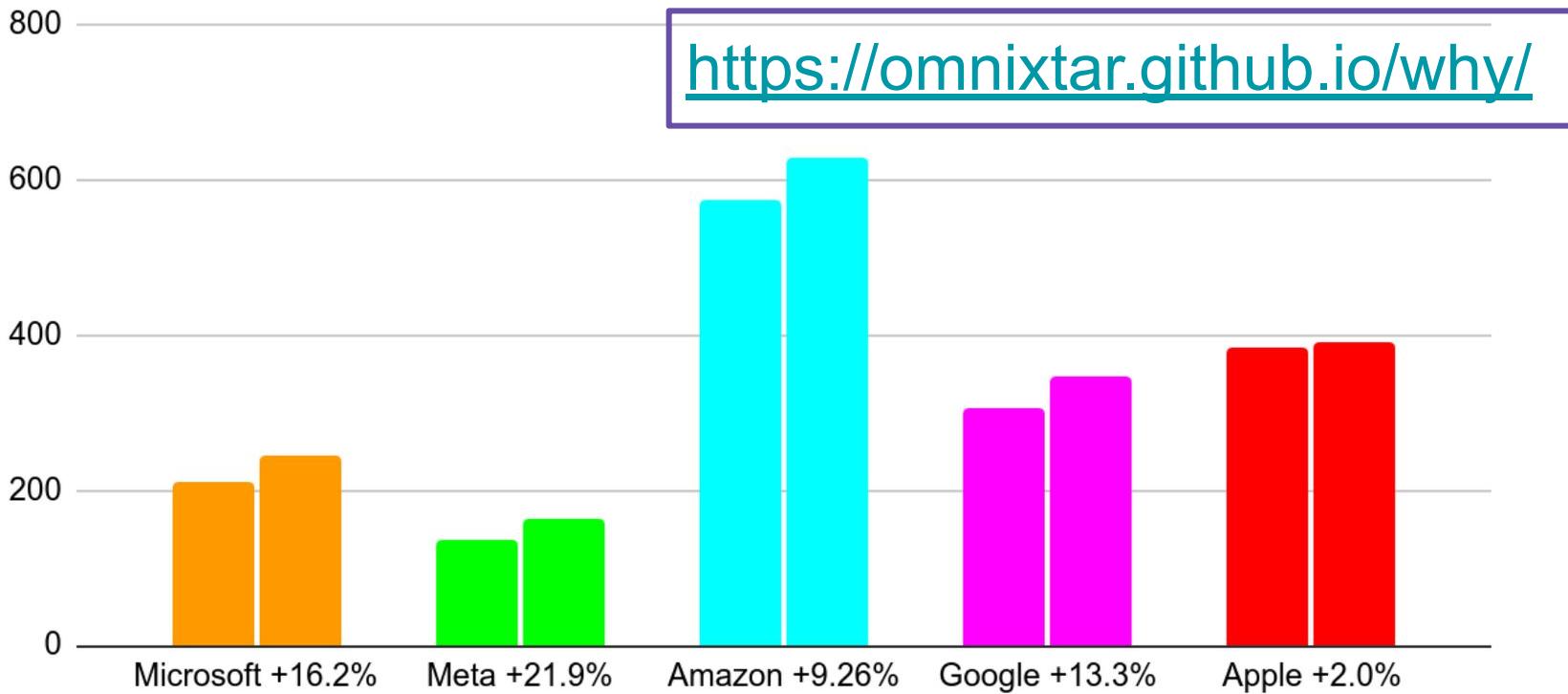
## What can CMP & FORTH do?

- Whatever Blockchain can, but simplified, easier to extend and implement.

1. Decentralised Social Media:
  - a. “I own my comments, photos, videos AND source code **ON MY OWN DEVICES.**” (Blockchain hardware is owned by “miners”.)
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  - Hashcode as index to distributed (decentralised) data records
  - Hardware owned by 1 million users >> MMAGA (plus “intelligence”)
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*(President Trump to arrive in Kuala Lumpur on 26 October 2025. Will 3-letter-agencies be watching? ....)*
4. Metanarchy = Decentralised Autonomous Organizations (plus plus) = global governance structure based on decentralised transactions in the Metaverse
  - “politically incorrect in English speaking countries” like the other M-word?
  - start in “smaller countries” outside USA & China e.g. Bouncy Castle (cryptographic libraries):
    - *On 18 October 2013, a not-for-profit association, the Legion of the Bouncy Castle Inc. was established in the state of Victoria, Australia, by the core developers and others to take*

# MMAGA Revenues 2023/24 (USD billions)

Total 2024: USD 1.776 Trillion (+10.27%)





## Omni\*Contract: Ownership & Rights of Use of Digital Asset (Source Code)

Like

- On the Separation of Disclosure and Royalties of the Source Code July 21, 2024
1. You, a human agent of a company or government agency, may read the source code without making payments to the author or authors, but if you execute this program on our behalf, we reserve the rights to claim royalties from you or your organization.
  2. Your copy of source code shall be attached with at least one Agent and your own Omnihash, to authorise you the right to use the source code. You shall pay maximum penalties allowed by a legal court of law for deploying the source code pertaining to clause (1).

MMAGA 2024 Revenues USD 1.8 trillion

Separation of Disclosure & Royalties (SDR)

s, we

Omni\*

you

```
>> s
```

```
< ► Array [...]
```

```
>> s
```

```
< ► Array [..., "EG86Y81yJg=="
```

```
>> f('hello h53: b64:')
```

“Chaining” or “Chained” (depending on grammar) properties:

1. Concatenation of strings.
2. Concatenation of functions or operations.

Use Hilbert’s Grand Hotel paradox to explain properties of hashcodes:

1. Room number is a hash number, derived from the Guest’s public key.
2. Each room has an “infinite cabinet”, with an infinite number of drawers. Each drawer is identified by a hash number, derived from the contents of documents in the drawer.

(Interesting research in abstract mathematics?)

Activities Text Editor Kha 23 Okt, 17:04

Open Save

selenium-0902.py tree\_dom.js trav\_c.js iframe.js libphos.js libphosm.js adam\_keypair.js tmp\_libhash.php libdom.js Phos\_chrome.py o\_hash.json

tmp\_libhash.php /var/www/dmeta/oxm/auth/\_

```
793 function fgl_h53() {
794 global $S; $s = array_pop($S); $h = cyrb53($s, 0); $S[] = $h;
795 }
796 function cyrb53($str, $seed=0) {
797 $h1 = 0xdeadbeef ^ $seed;
798 $h2 = 0x41c6ce57 ^ $seed;
799 $h1 = i32($h1);
800 $h2 = i32($h2);
801 // echo "$h1 $h2\n";
802 for ($i = 0; $i < strlen($str); $i++) {
803 // $ch = $str.charCodeAt(i);
804 $ch = charCodeAt($str, $i);
805 // $h1 = Math.imul($h1 ^ $ch, 2654435761);
806 $h1 = i32(i32($h1 ^ $ch) * 2654435761);
807 // $h2 = Math.imul($h2 ^ $ch, 1597334677);
808 $h2 = i32(i32($h2 ^ $ch) * 1597334677);
809 // echo "$ch $h1 $h2\n";
810 }
811 $h1 = m32(i32($h1 ^ r32($h1, 16)), 2246822507) ^ m32(i32($h2 ^ r32($h2, 13)), 3266489909);
812 $h2 = i32(m32($h2 ^ r32($h2, 16), 2246822507)) ^ i32(m32($h1 ^ r32($h1, 13), 3266489909));
813
814 return 4294967296 * (2097151 & $h2) + r32($h1, 0);
815 }
816 }
```

PHP Tab Width: 2 Ln 795, Col 2 INS

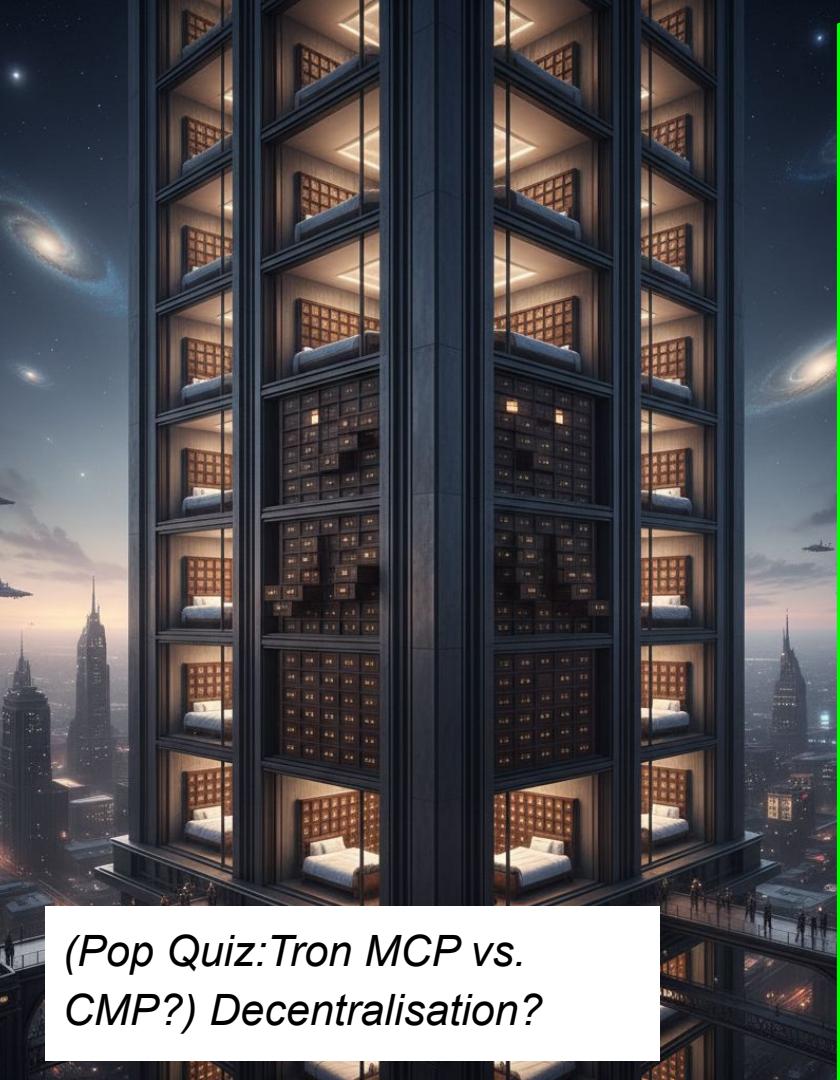
Activities Text Editor Kha 23 Okt, 17:07

Open Save

tmp\_libhash.php  
/var/www/dmeta/oxm/auth/\_

selenium-0902.py tree\_dom.js trav\_c.js iframe.js libphos.js libphosm.js adam\_keypair.js tmp\_libhash.php libdom.js Phos\_chrome.py o\_hash.json

```
725 function fgl_b64(){
726 global $S; $s = array_pop($S); $h = bnToB64($s); $S[] = $h;
727 }
728
729 function bnToB64($bn) {
730 $a = gmp_init($bn);
731 $hex = gmp_strval($a,16);
732 if (strlen($hex) % 2) { $hex = '0' . $hex; }
733
734 $bin = [];
735 $i = 0;
736 while ($i < strlen($hex)) {
737 $d = hexdec(substr($hex, $i, 2));
738 $b = chr($d);
739 $bin[] = ($b);
740 $i += 2;
741 }
742 return base64_encode(implode($bin));
743 }
744
745
746
747 // if (!Math.imul) Math.imul =
748 function m32($a, $b) {
```



*(Pop Quiz: Tron MCP vs.  
CMP?) Decentralisation?*

## Hilbert Hotel & Infinity Cabinet

Hilbert Hotel (1924)

Turing machine (1936)

Room number is a hash number.

Each room has a cabinet with infinite number of drawers.

Drawers are identified by a hash number, derived from the contents of documents in the drawer.

### Chained Hash Properties:

1. Concatenation of strings
2. Concatenation of hash functions

Discovered not Designed: Mathematical properties are discovered, by algorithms designed by programmers.

Recursive structures: Containing substructures – [hotel, rooms, cabinets, files, documents, texts] shown in JSON and DJSON.



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  2. Your copy of source code shall be attached with at least one Omni\* Hash Contract bearing the Omnihash of a Omni\* Agent and your own Omnihash, to authorise you the permissions to use or modify said source code, otherwise you shall pay maximum penalties allowed by a legal court of your jurisdiction, for the damages you have incurred for deploying the source code pertaining to clause (1).

Omnihash = Hash for any type of digital asset (photos, documents, videos, animations, simulations, PROGRAM SOURCE CODE etc.) = Hash of DJSON

DJSON Decentralised JSON = JSON string (object) containing at least one Omnihash (recursive definition)

Omni\*Web: \* = anything in Linux, cannot be copyrighted in English speaking countries? (NVIDIA, OpenAI, etc, all has “Omni” products.)

Crypto-Metaprogramming. Links.

<https://omnixtar.github.io/djson/>

**Omni\*Web: Crypto-Metaprogramming (CMP) as alternative to Model-View-Controller; towards Metanarchy**

[https://www.youtube.com/watch?v=P\\_M3PVn9J7I](https://www.youtube.com/watch?v=P_M3PVn9J7I)

DJSON Decentralised JSON is a JSON object or its encoded string where at least one of the fields is an Omnihash, representing the owner of this JSON object.

- `["2025-10-24T14:25:28.207+0000", "like", "CXAGcRKevA==", "CXAGcRKevA==", "HymWBzfj9A==", {"repo": "https://github.com/omnixtar/omnixtar.github.io/", "contract": "https://omnixtar.github.io/contract/", "ghh": "https://github.com/omnixtar/omnixtar.github.io/commit/19bb258190d57d6246840bf8ccc8957ae880e341", "datetime": "2025-10-24T04:41:21.000Z"}]`
- Omnihash: `DgV6_qnujw==`

Try this yourself:

1. Press F12 to bring up browser console.
2. Run the following code:

```
omnistart()
j0=["2025-10-24T14:25:28.207+0000", "like", "CXAGcRKevA==", "CXAGcRKevA==", "HymWBzfj9A==", {"repo": "http
s.push(JSON.stringify(j0))
f('h53: b64: path:')
s[s.length-1]
```

omnixtar / omnixtar.github.io

Code Issues 3 Pull requests Actions Projects Wiki Security 1

omnixtar.github.io Public

main Go to f omnixtar authored 2 hours ago

omnixtar italic ✓ 19bb258 · 2 hours ago

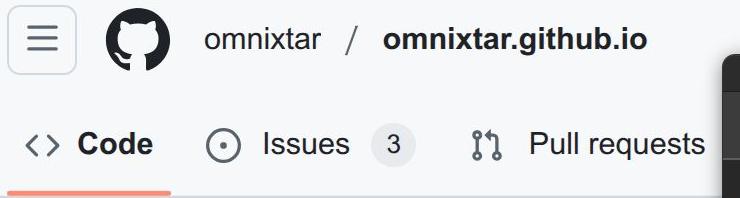
.vscode f\_t.js 2 months ago

6-omni I 8 months ago

BitDurian logo 4 months ago

Readme Activity 1 star 1 watching 0 forks

<https://github.com/omnixtar/omnixtar.github.io/commit/19bb258190d57d6246840bf8ccc8957ae880e341>



Commit 19bb258

omnixtar authored 2 hours ago · ✓ 3 / 3 · 

*italic*

main

 Filter files...

▼  contract

 index.md

The screenshot shows the Chrome DevTools interface with the 'Elements' tab selected. The main pane displays the following DOM snippet:

```
ar" class="Box-sc-62in7e-0 Au
thorAvatar-module__Authc arContainer--Z1TF8">...
 flex
authored

▼<relative-time class="pl-1"
datetime="2025-10-24T04:41:2
1.000Z" title="Oct 24, 2025,
12:41 PM GMT+8">
```

The 'relative-time' element is highlighted with a red box and a cursor arrow pointing to its 'title' attribute. The DevTools navigation bar at the bottom shows the current element path: 'commitAttributionContainer--Si80C relative-time.pl-1 #shadow-root'. Below the path, tabs for 'Styles', 'Computed', 'Layout', and 'Event Listeners' are visible, along with a 'Filter' input field and several toolbar icons.

```
["2025-10-24T14:25:28.207+0000", "like",
 "CXAGcRKevA==", "CXAGcRKevA==", "HymWBzfj
9A==", { "repo" : "https://github.com/omnix
tar/omnixtar.github.io/", "contract" : "ht
tps://omnixtar.github.io/contract/", "gh
h" : "https://github.com/omnixtar/omnixta
r.github.io/commit/19bb258190d57d624684
0bf8ccc8957ae880e341", "datetime" : "2025-
10-24T04:41:21.000Z" }]
```

- Omnihash: DgV6\_qnujw==

1. The existence of (Omni)hash implies the input string concerned has been fed into a hash function to obtain the (Omni)hash.
2. A second party (anyone other than the first party) may feed the same input to the same hash function to obtain the same (Omni)hash, to verify the hash is correct, and therefore the first party has indeed performed step (1).
3. Step (2) implies *the input string is as intended* by the first party.
4. Step (3) is the default inference, as agreed by all parties concerned.

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Activities Google Chrome Sel 21 Okt, 16:47 zh

Forth - The programming ... reddit.com/r/Forth/hot/ Log In

# r/Forth

Hot ▾

 u/Alternative-Grade103 • 1 day ago

## Big Int Exponentiation

As of today, and after a few false starts, I now have exponentiation working for arrays holding big integers of any size up to limit of memory. That both with and without modulo, on any width stack. Also a word to solve greatest common factor on said arrays.

9

0

Share

 u/Tradu\_APAC • Promoted

## Start with Tradu and get our free\* TradingView Premium! Save up to \$67.95/month. Benefit from this seamless integration at no cost - no

+ Create Post

Join

**Forth - The programming language for low-fat computing.**

"In particular you need to avoid writing code for situations that will never arise in practice. You need to avoid writing code to handle a general problem that you are never going to encounter. I don't need to solve the general problem when I only have to solve these specific cases." -- Chuck Moore

Created Jul 1, 2008

Public

1.2K

26

Forthers

Weekly contributions

Activities Google Chrome Sel 21 Okt, 16:48 zh

Python reddit.com/r/Python/ Log In

# reddit r/Python Search in r/Python

## r/Python

+ Create Post Join

Best ▾

Community highlights

**Sunday Daily Thread: What's everyone working on this...**  
2 votes • 0 comments

**Tuesday Daily Thread:...**  
1 vote • 0 comments

**I built a Persistent KV Store in Pure Python**

u/vollhard-natta • 15 hr. ago

Python! The official Python community for Reddit! Stay up to date with the latest news, packages, and meta information relating to the Python programming language. --- If you have questions or are new to Python use r/LearnPython

Created Jan 25, 2008 Public

250K Pythonistas 2.1K Weekly contributions

programming

Sel 21 Okt, 16:55



reddit.com/r/programming/



r/programming

Search in r/programming

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# r/programming

[+ Create Post](#)[Join](#)

Best



u/Enigma\_1769 • 1mo ago

## Vibe Coding Is Creating Braindead Coders

[Up 1.8K](#)

301 comments

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u/Old-Resolve-1036 • Promoted

## The record-breaking deal on Dragon Den.

nextadsagency.com

[Up Vote](#)

0 comments

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Report



## programming

Computer Programming

Created Feb 28, 2006

Public

336K



4.9K

Weekly visitors



Weekly contributions

*6 million members visible  
from app search field*

u/BlueGoliath • 5h ago

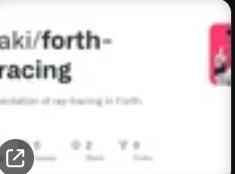
R/PROGRAMMING RULES

Chrome is being controlled by automated test software.

 r/Forth • 11 days ago

## Ray Tracing That Was Anything \*But\* a Weekend — in Forth

<https://github.com/kirisaki/forth-raytracing>



Upvote (39) | Comment (19) | Share

 u/Mak4th • 21 days ago

## riscv-forth without gnu assembler

<https://github.com/mak4444/tc-riscv-forth> This is <https://github.com/JimMarshall35/riscv-forth> but building by target compiler means. For trace the compilation process, use the F7\_ED command <https://github.com/mak4444/tc-riscv-forth/blob/main/riscv/Meta/riscv32.4th#L227>

Upvote (9) | Comment (6) | Share

[https://www.reddit.com/r/Forth/comments/1o2z76d/ray\\_tracing\\_that\\_was\\_anything\\_but\\_a\\_weekend\\_in/](https://www.reddit.com/r/Forth/comments/1o2z76d/ray_tracing_that_was_anything_but_a_weekend_in/)

```
hongwu@hongwu-Latitude-5480: ~
```

>>>  
>>>  
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Forth - The programming x +  
hongwu@hongwu-Latitude-5480: ~ < > C reddit.com/r/Forth/hot/ Search in r/Forth Log In ...  
Chrome is being controlled by automated test software.

≡  r/Forth x Search in r/Forth

u/A\_kirisaki • 11 days ago  
**Ray Tracing That Was Anything \*But\* a Weekend — in Forth**  
<https://github.com/kirisaki/forth-raytracing>

39 19 Share

u/Mak4th • 21 days ago  
**riscv-forth without gnu assembler**  
<https://github.com/mak4444/tc-riscv-forth> This is <https://github.com/JimMarshall35/riscv-forth> but building by target compiler means. For trace the compilation process, use the F7\_ED command [https://github.com/mak4444/tc-riscv-forth/blob/main/riscv/Meta/riscv32\\_4th#L227](https://github.com/mak4444/tc-riscv-forth/blob/main/riscv/Meta/riscv32_4th#L227)

9 6 Share

[https://www.reddit.com/r/Forth/comments/1o2z76d/ray\\_tracing\\_that\\_was\\_anything\\_but\\_a\\_weekend\\_in/](https://www.reddit.com/r/Forth/comments/1o2z76d/ray_tracing_that_was_anything_but_a_weekend_in/)

```
driver.get('https://www.reddit.com/r/forth')()
```



r/Forth



Search in r/Forth

Log In



I realized that while I was doing it. But I figured it was fine for this time. It seems extension anyway.



Reply



Award



Share



Specific\_Cheek5325 • 9d ago

I enjoyed reading the blog post. Really cool man :)



Reply



Award



Share



A\_kirisaki OP • 9d ago



Reply



Award



Share



Wootery • 3d ago

Very cool, thanks for posting.

It would be interesting to see the performance difference between `gforth-fast` (which enables its primitive JIT, a.k.a. *dynamic superinstructions*) and `gforth` using traditional code.



Reply



Award



Share



DevTools - www.reddit.com/r/Forth/comments/1o2z76d/ray\_tracing\_that\_wa... □ ×

Elements Console > 2 3 2 | ⚙️ ⋮

9 days ago" class="relative" award-count="0" aria-hidden="false">> ... </shreddit-comment> slot

> <shreddit-comment-tree-ad comment-id="t1\_nk44rg3" class="-mt-md" should-track-position> ... </shreddit-comment-tree-ad> slot

> <shreddit-comment author="Wootery" thingid="t1\_nk44rg3" depth="0" permalink="/r/Forth/comments/1o2z76d/comment/nk44rg3/" reload-u="/svc/shreddit/comment/t1\_nk44rg3?depth=0&subredditName=Forth" score="2" postid="t3\_1o2z76d" content-type="text" previous-actions-feature arialabel="Comment from Wootery 3 days ago" class="relative" award-count="0" aria-hidden="false"> ... </shreddit-comment> slot == \$0

</shreddit-comment-tree>

</faceplate-batch>

</div>

</main>

lit-comment-tree#comment-tree.mt-sm shreddit-comment.relative

Styles Computed Layout Event Listeners >

Filter :hov .cls +, 📐 🔍



Up 2 Down Reply Award Share ...



A\_kirisaki OP • 9d ago



Up 2 Down Reply Award Share ...

shredit-comment.relative 641.87 x 174.53



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Up 2 Down Reply Award Share ...



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Up 2 Down Reply Award Share ...

DevTools - www.reddit.com/r/Forth/comments/1o2z76d/ray\_tracing\_that\_wa...

Elements Console > Delete element

- Add attribute
- Edit attribute
- Edit as HTML
- Duplicate element
- Delete element
- Cut
- Copy
- Paste
- Hide element
- Force state
- Break on
- Expand recursively
- Collapse children
- Capture node screenshot
- Scroll into view
- Focus
- Badge settings
- Store as global variable
- Ask AI

lit-comment-tree#comment-tree

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 A\_kirisaki OP • 9d ago

2

 2   Reply  Award  Share

 Wootery • 3d ago

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Inspect

Very cool, thanks for posting.

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2 Reply Award Share ..

```
DevTools - www.reddit.com/r/Forth/comments/1o2z76d/ray_tracing_that_wa... Elements Console > ✘ 3 ⚠ 2 | ⚙ ...
...
-center overflow-hidden author-name-meta"> flex slot 
▼<faceplate-tracker source="post_detail" action="click" noun="comment_author" class="contents">
 Wootery
 == $0
 <!---->
 <!---->
 </faceplate-tracker>
 </div>
▶<div slot="content">(...)</div>
a.truncate.font-bold.text-neutral-content-strong.text-12.focus-visible
```



Upvote (2) | Reply | Award | Share | ...



A\_kirisaki OP • 9d ago



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Upvote (2) | Reply | Award | Share | ...



OMNIWEB-USER-X • 3d ago

Lorem ipsum blah blah blah

*gforth-fast* Lorem ipsum blah blah blah *dynamic superinstructions* Lorem ipsum blah blah blah

Upvote (2) | Reply | Award | Share | ...

DevTools - www.reddit.com/r/Forth/comments/1o2z76d/ray\_tracing\_that\_wa... ...

Elements Console > x 2 ▲ 3 ↗ 2 ...

```
</div>
</div>
<div class="md text-14-scalable rounded-2 pb-2xs overflow-hidden" id="t1_nk44rg3-comment-rtjson-content" slot="comment">
 <div id="t1_nk44rg3-post-rtjson-content" class="py-0 xs:mx-xs mx-2xs max-w-full scalable-text" style="--emote-size: 20px">
 <p>Lorem ipsum blah blah blah</p>
 <p>"Lorem ipsum blah blah blah" <code>gforth-fast</code> "Lorem ipsum blah blah blah" dynamic superinstructions "Lorem ipsum blah blah blah" == $0</p>
 </div>
</div>
```

n-content.py-0.xs\:mx-xs.mx-2xs.max-w-full.scalable-text p (text)

Styles Computed Layout Event Listeners >

Filter :hov .cls + 🖌️ 🔍



2 Reply Award Share ...



A\_kirisaki OP • 9d ago



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Wootery • 3d ago

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OMNI\*WEB-USER-X • 3d ago

Lorem ipsum blah blah blah

gforth-fast Lorem ipsum blah blah blah *dynamic superinstructions* Lorem ipsum blah blah blah

2 Reply Award Share ...

DevTools - www.reddit.com/r/Forth/comments/1o2z76d/ray\_tracing\_that\_wa... □ x

Elements Console > 4 3 28 | Default levels ▾

28 Issues: 28 | 1 hidden ▾

```
> j0=[u:document.querySelectorAll('a.truncate')
[16].innerHTML, c:document.querySelectorAll('div.md')
[17].innerText,
t:document.querySelectorAll('time.text-12')
[17].getAttribute('datetime')
}

< {u: 'OMNI*WEB-USER-X', c: 'Lorem ipsum blah blah blah\n\nLorem ipsum blah blah ...namic superinstructionsLorem ipsum blah blah blah', t: '2025-10-18T09:14:37.921Z'}
```

```
> j0=[u:document.querySelectorAll('a.truncate')
[16].innerHTML, c:document.querySelectorAll('div.md')
[17].innerText,
t:document.querySelectorAll('time.text-12')
[17].getAttribute('datetime'), h:'H-xchGCVBg=='

}

< {u: 'OMNI*WEB-USER-X', c: 'Lorem ipsum blah blah blah\n\nLorem ipsum blah blah ...namic superinstructionsLorem ipsum blah blah blah', t: '2025-10-18T09:14:37.921Z', h: 'H-xchGCVBg=='}
```

▶

```
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h:'H-xchGCVBg==' }

{u: 'OMNI*WEB-USER-X', c: 'Lorem ipsum blah blah blah\n\nLorem ipsum blah
blah ...namic superinstructionsLorem ipsum blah blah blah', t:
'2025-10-18T09:14:37.921Z', h: 'H-xchGCVBg=='}

{"htmp":["ctmp:","Graph/hg/tmp","fgc:","trim:","dup:","h53:","b64:","path:","Graph/hg"","swap:","2","msss:","w:","",""]} // php phos.php httmp
```

```
hongwu@hongwu-Latitude-5480:/var/www/dmeta/oxm/auth$ ls -tl Graph/hg|head
total 1064
-rw-rw-r-- 1 hongwu hongwu 183 Okt 23 16:33 AQCuXRWuKQ==
```

⊖  2   Reply  Award  Share ...



A\_kirisaki OP • 9d ago



↑ 2   Reply  Award  Share ...

<https://www.reddit.com/r/Forth/comments/1o2z76d/comment/nk44rg3/>



Wootery • 3d ago



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↑ 2   Reply  Award  Share ...



OMNIWEB-USER-X • 3d ago

Lorem ipsum blah blah blah

Lorem ipsum blah blah blah `gforth-fast` Lorem ipsum blah blah blah *dynamic superinstructions* Lorem ipsum blah blah blah

↑ 2   Reply  Award  Share ...

```
hongwu@hongwu-Latitude-5480:/var/www/dmeta/oxm/auth$ ls -tl Graph/hg|head -2
total 1068
-rw-rw-r-- 1 hongwu hongwu 64 Okt 23 19:39 HwCnRhzKlw==
```

```
hongwu@hongwu-Latitude-5480:/var/www/dmeta/oxm/auth$ cat Graph/hg/HwCnRhzKlw\= \= ;echo
https://www.reddit.com/r/Forth/comments/1o2z76d/comment/nk44rg3/
```

```
hongwu@hongwu-Latitude-5480:/var/www/dmeta/oxm/auth$ ls -tl Graph/hg|head -2
total 1072
-rw-rw-r-- 1 hongwu hongwu 95 Okt 23 19:58 GWJkl9-B7w==
```

```
hongwu@hongwu-Latitude-5480:/var/www/dmeta/oxm/auth$ cat Graph/hg/GWJkl9-B7w\= \= ;echo
https://www.reddit.com/r/Forth/comments/1o2z76d/ray_tracing_that_was_anything_but_a_weekend_in/
```

DJSON for like, share, follow, etc, on HwCnRhzKlw==, GWJkl9-B7w==

- [\["2025-02-11T14:25:28.207+0000", "like", "CXAGcRKevA==", "CXAGcRKevA==", "HymWBzfj9A==", "HymWBzfj9A== s: x:"\]](#)
- [\["2025-02-11T14:25:28.207+0000", "like", "CXAGcRKevA==", "GWJkl9-B7w==", "HwCnRhzKlw==", "HwCnRhzKlw== like: s: x:"\]](#)
- [\["2025-02-11T14:25:28.207+0000", "share", "CXAGcRKevA==", "GWJkl9-B7w==", "HwCnRhzKlw==", "HwCnRhzKlw== share: s: x:"\]](#)
- [\["2025-02-11T14:25:28.207+0000", "follow", "CXAGcRKevA==", "GWJkl9-B7w==", "HwCnRhzKlw==", "HwCnRhzKlw== follow: s: x:"\]](#)



r/Forth



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← r/Forth • 11d ago  
A\_kirisaki

...

## Ray Tracing That Was Anything \*But\* a Weekend — in Forth

# kirisaki/forth-raytracing

An implementation of ray-tracing in Forth.



1  
Contributor

0  
Issues

2  
Stars

0  
Forks



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r/allinpodofficial • 10d ago

Paging crypto czar, this is all normal stuff right?



478 upvotes · 219 comments



## DJSON: Decentralised JSON

Like

DJSON Decentralised JSON is a JSON object or its encoded string where at least one of the fields is an Omnihash, representing the owner of this JSON object.

- ["2025-02-11T14:25:28.207+0000", "like", "CXAGcRKevA==", "CXAGcRKevA==", "HymWBzfj9A==", "HymWBzfj9A== s: x:"]

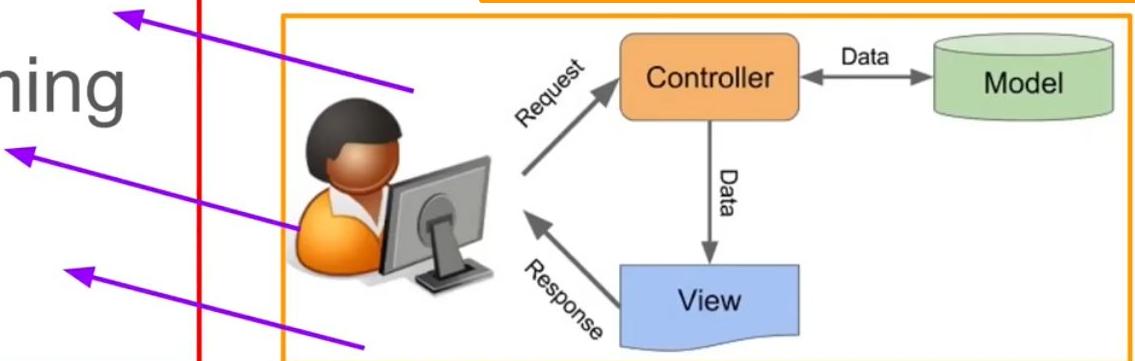
In the DJSON above, the fields are:

- timestamp, action, current\_user\_ID, prev\_msg\_owner, doc\_hash, messages

# Crypto-Meta-Programming (CMP)

Omni\*Web

[https://www.youtube.com/watch?v=P\\_M3PVn9J7I](https://www.youtube.com/watch?v=P_M3PVn9J7I)



Omni\*Web: Crypto-Metaprogramming (CMP) as alternative to Model-View-Controller; towards Metanarchy



Mi4 Metaprogramming in Forth  
56 subscribers



0



Share



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Clip



All

Computer programming

Computer Science



Singapore's Tharman Destroys an Arrogant BBC Host



## What can CMP & FORTH do?

- Whatever Blockchain can, but simplified, easier to extend and implement.

1. Decentralised Social Media:
  - a. “I own my comments, photos, videos AND source code **ON MY OWN DEVICES.**” (Blockchain hardware is owned by “miners”.)
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3. Artificial Intelligence & Beyond: Distributed storage & algorithms (TMP & AI)
  - Hashcode as index to distributed (decentralised) data records
  - Hardware owned by 1 million users >> MMAGA (plus “intelligence”)
  - enough for setting up “Metanarchy Government”  
*(President Trump to arrive in Kuala Lumpur on 26 October 2025. Will 3-letter-agencies be watching? ....)*
4. Metanarchy = Decentralised Autonomous Organizations (plus plus) = global governance structure based on decentralised transactions in the Metaverse
  - “politically incorrect in English speaking countries” like the other M-word?
  - start in “smaller countries” outside USA & China e.g. Bouncy Castle (cryptographic libraries):
    - *On 18 October 2013, a not-for-profit association, the Legion of the Bouncy Castle Inc. was established in the state of Victoria, Australia, by the core developers and others to take*

## HBC: Omnihash Bullion Coins

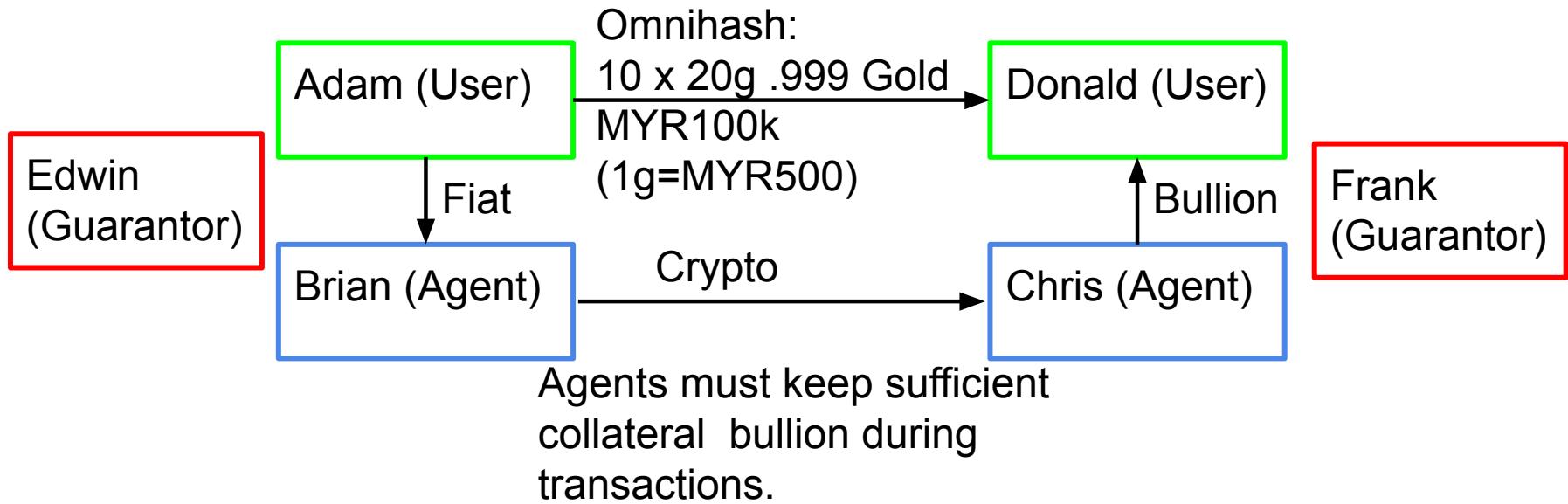
1. HBC: Omnihash Bullion Coins (Physical Gold/Silver),
2. Trispecies Monetary System: Bullion, Fiat,  
Crytocurrencies
3. Liberalism vs. “Omnipotent Government” (OGism!!)

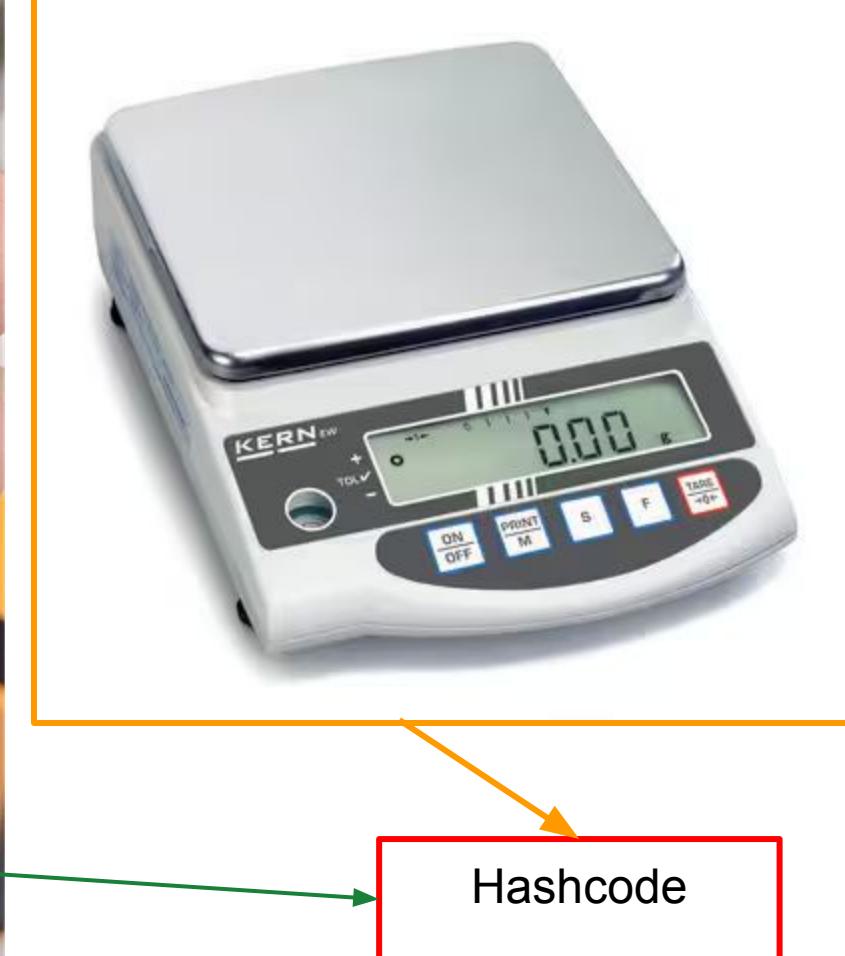


Agents must keep  
sufficient collateral  
of bullion in transit.

## HBC: Omnihash Bullion Coins

1. HBC: Omnihash Bullion Coins (Physical Gold/Silver),
2. Trispecies Monetary System: Bullion, Fiat,  
Cryptocurrencies
3. Liberalism (Metanarchy) vs. “Omnipotent Government”





Hashcode

```
hongwu@hongwu-Latitude-5480:/var/www/dmeta/oxm/auth$ cat Graph/hg/FtyMvMgeoA\=\= ;echo
{ "a": "1", "t": "2025-10-16 09:04:43.683200", "n": "Adam in MY wish to send MYR 100k to Donald in TH.", "s":
"n": "1", "job": "payment", "n2": "variables", "MYR": "currency", "amount": "100k", "sender": "Adam", "recipient":
"Donald" }
```

Hash of JSON is FtyMvMgeoA==

```
hongwu@hongwu-Latitude-5480:/var/www/html/oxw/auth/Graph/dmeta$ \
> cat H-xchGCVBg\=\=/BtFODs5CQ\=\= ;echo
["2025-10-18T00:10:43.684+0000", "reply_to", "H-xchGCVBg==", "G5bClrzsVg==",
 "Ge6NiA5cLw==", "Graph\hg\FtyMvMgeoA=="]
```

User Adam H-xchGCVBg== sends FtyMvMgeoA== to User Donald G5bClrzsVg==

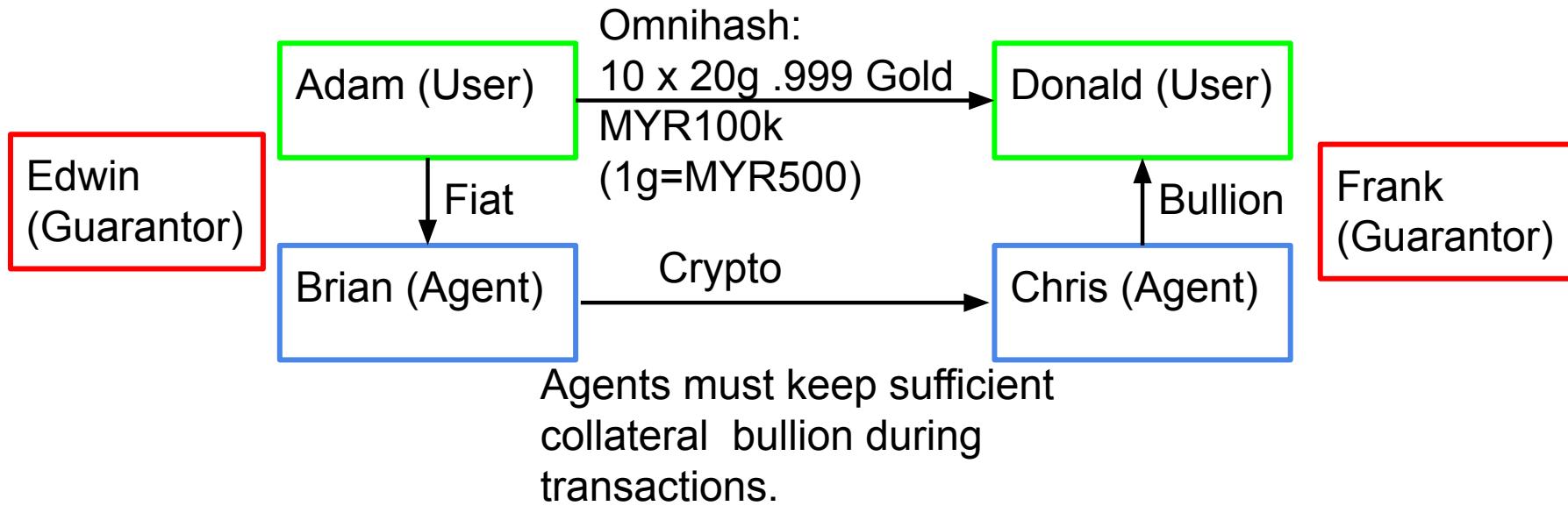
```
hongwu@hongwu-Latitude-5480:/var/www/html/oxw/auth/Graph/dmeta$ \
> cat H-xchGCVBg\=\=/CxenfQAHxw== ;echo
["2025-10-18T00:58:01.196+0000","reply_to","G5bClrzsVg==","H-xchGCVBg==",
"BtF0Ds5CQ==","ACCEPT chris agent apk:"]
```

User Donald replied ACCEPT and appointed User Chris as his agent.

- a. Adam in MY (Malaysia) wish to send MYR 100k to Donald in TH (Thailand).
- b. Adam sends message to Brian (Agent in MY).
- c. Brian shows gold 20g worth MYR 10k via live camera feed and weighing machine, generates sensor hash code.
- d. Brian sends message to Christ (Agent in TH)
- e. Adam sends Brian 10 batches of MYR 10k, in MYR, by cash or local bank transfer.
- f. Brian sends Chris 10 batches of MYR 10k, in cryptocurrencies USDT etc.
- g. Chris sends Donald 10 batches of THB 77.5k, by cash or local bank transfer.
- h. Guarantors Edwin and Frank (or a “chain” of Guarantors) may provide their hashcodes to all the parties above, to be included in DJSON for verifying each steps.
- i. All parties concerned “may” choose to disclose the transactions to local authorities.

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# Overview

Introduction (5 min)

Fundamentals (3 min)

What can CMP & FORTH do?

- From Web-based Omni\*Web to FORTH Triple-less Card Computer (TCC)
- Artificial Intelligence & Beyond?
- (4 min)

Phoscript-Linux/C-FORTH Sandwich Model (5 min)

Conclusions (3 min)

***Triple-less Card Computer  
(Domain-Kernel-Database-less)***

***Phoscript-Linux/C-FORTH Sandwich Model***

French Revolution, Ownership of Property & Decentralised Digital Assets

Omnihash & DJSON Decentralised JSON

Hash as Pointer & Mask, encrypt hash with PBK

Chained Hash Properties (String & Function)

DJSON Decentralised JSON is a JSON object or its encoded string where at least one of the fields is an Omnihash, representing the owner of this JSON object.

- ```
[ "2025-02-11T14:25:28.207+0000", "like", "CXAGcRKevA==", "CXAGcRKevA==", "HymWBzfj9A==",  
{"repo":"https://github.com/omnixtar/omnixtar.github.io/", "contract":"https://omnixtar.github.io/  
contract/", "ghh":"https://github.com/omnixtar/omnixtar.github.io/  
commit/19bb258190d57d6246840bf8ccc8957ae880e341", "datetime":"2025-10-24T04:41:21.000Z" } ]
```

FORTH predicated C-style compilation programs.

Phoscript can become a bridge between C-style & FORTH?

Phoscript-Linux/C-FORTH Sandwich Model

1. Minimal VM: Linux Java I2P Apache php
2. Sandwich Model (user space programs):
 - a. Top: P2C (Phos to C) P2J (Phos to Java) P2PHP (Phos to PHP)
[start: 0, end: replace host language functions]
 - b. Middle: C-lib, J-lib (Java), PHP-lib in .o (object);
[start: 100%, end: replaced by Top & Bottom]
 - c. Bottom: need equivalent F-lib (FORTH)
[start: 0, end: replace Middle layer host language libraries]
3. Replace Kernel? (Need experience from Phase 2)
 - a. Use P2C to replace C code with Phoscript code.
 - b. Write FORTH code to replace low level C code.

```
1272
1273 function FGL($a)
1274 {
1275     global $argv, $S, $SS, $xk, $xs, $SC, $SL, $CDW, $BV;
1276     $a = preg_replace('/\s+/', ' ', $a);
1277     $a = explode(' ', trim($a));
1278     $SS[] = array(0, $a);
1279 }
1290 do {
1291
1292     // 20230609 Exception handling / errors etc.
1293     if (gettype(end($S))=="string") {
1294         if (substr(end($S),0,9)=="__ERROR__") { // exit; // break;
1295
1296             call_user_func("fgl_" . $fn);
1297
1298             } else {
1299                 if ($v == '====') {
1300                     $S[] = array_pop($S) === array_pop($S);
1301                 } else {
1302                     $S[] = $v;
1303                 }
1304             }
1305         }
1306     } while ($vk < $xl); // LOL $xk++ but $vk is not?
1307
1308     array_pop($SS);
1309
1310 }
```

<https://youtu.be/mYjKS0KiJVg?t=455>

3 4 +
Phoscript
Metashell

1

Inverse Shunting
Yard Algorithm
(ISYA)

Infix: 3 + 4
C, C++, PHP, Python
Java, JavaScript

Sandwich API
Model

(internal operations
of compilers,
interpreters)

2

Shunting Yard
Algorithm (SYA)



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{"repo":"https://github.com/omnixtar/omnixtar.github.io/", "contract":"https://omnixtar.github.io/
contract/", "ghh":"https://github.com/omnixtar/omnixtar.github.io/
commit/19bb258190d57d6246840bf8ccc8957ae880e341", "datetime":"2025-10-24T04:41:21.000Z" }]
```

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