THE GREAT RESET
TIME
IMF
USD
WORLDCOIN
UTOPIA ? ΔδOBLIVION ?

FedNOW
Bitcoin
CBDC (s)
StableCoins
TARIFFS
WorldCoin
IMF
Stable Coin
BRICSPAY
GDP
INDEX
Demurrage
Fees for RWA
COMMODITIES
Closer < $$$
Closer < CO2
</URN>
SYNC DELTA (s)
Data Snapshots
</Org_ID>
TIMESTAMP SERVER
</URN>
Δδ
GENESIS EPOCH
EPOCH +1
EPOCH +2
EPOCH +N
Net, Net of $ formed w 1) Epoch Cycles 2) Syntax
cycle n
n + 1
n + 2
TIME CHAIN
FOUNDATION TECH

THE WORLD
GAME
ANNEX K
SIGNALS &
TELEMETRY
the world famous inventor of the geodesic dome
r. buckminster fuller
operating manual
for
spaceship earth

TradeFi
TRC Trade Reference Currency
currencyindex
#20022
#1421
ISO
I.R.S.
CLOSER = CHEAPER < FUEL < CO2

BLOCKCHAIN CONSENSUS ALGORITHMS
BLOCKCHAIN CONSENSUS ALGORITHMS

HARVESTING GOLD:
THOMAS EDISON'S EXPERIMENT TO REINVENT AMERICAN MONEY
Monetary Option 1922
BY DAVID L. HAMMES

STAT MEAN VALUE INDEX
CONTRIBUTIONS TO STATISTICS
X
Σ
Δδ
Price Indexes in Time and Space
Methods and Practice
SchellingPoint

DeFI
Eco Econ Incentives
TIME- SPACE METRICS METERS
HEARTBEAT % REAL GDP
("108")
ALGORITHMIC REGULATION

The Timekeeper is the primary antagonist in Borderlands 4, a ruthless dictator who rules over the planet Kairos from on high.

A world-altering catastrophe threatens his perfect Order, unleashing mayhem across Kairos, the most dangerous planet discovered so far in the Borderlands universe

BORDERLANDS 4

USPTO 13/573,002

QFS – DeFi
Sync Deltas
Sound / Light

Edison's Monetary Option 1922

Hashed Timelock Contract (HTLC) / Epoch Sync Deltas Δ δ

GRAPHENE OPTICAL CHIP

QUOTE: "As in nature, all is ebb and tide, all is wave motion, so in all branches of industry, alternating currents electric wave motion will have sway." Nikola Tesla

Because abstract ideas, laws of nature, and natural phenomenon "are the basic tools of scientific and technological work"..Supreme Court Alice Corp., 573 U.S. at 216, 110 USPQ2d at 1980; Mayo Collaborative Servs. v. Prometheus Labs., Inc., 566 U.S. 66, 71, 101 USPQ2d 1961,

World Game Annex K

Signals & Telemetry

INTERNET, NET of $$$ =
1. Epoch Time Cycles
2. Syntax instructions

Eco Economic Epoch Heartbeat: reuse of DoD / NATO signal, telemetry syntax - symbol set structured data exchange system of systems engineering framework for DAO Trade Federations, programmable money / Economy. It is time to stand on the shoulders of giants. SLA Service Level Agreement Eco incentives: closer = < time, cheaper, < fuel, < CO2
"Build a new model that makes the old model obsolete" Buckminster Fuller

{"URN"}
{"URN"
{"URN"
</URN>

300 + Use Case message sets
OPSCODE BREVITY CODES
- Symbols, symbol sets

BATTLEFIELD
DIGITIZATION OOTW Operations Other than war

"Build a new model"
Standing on the shoulders of giants

PARALLEL ECONOMIES

Eco Economic Epochs
For Programmable $$$
Programmable Economy
Re Monetize (Crypto) Currency
Symbol / Message Sets A.I.
FIREFLY Inspired
Heartbeat Algorithm
Message Event Bus

Foundation Technology Trinity:

1, EPOCH (s) = Time intervals, cycles

2. SPACE (land use meme) ex: IRS memo #1421 "Bitcoin transaction akin to land"

3. SYNTAX structured data mapped to symbols for A.I. / man - machine interface

THESIS: All net artifacts, net of $ are formed with:

1) Epoch time cycle intervals ex: chip oscillations

2) Syntax parsed, processed in epoch time intervals

All things internet, programmable net of money are formed using:

1) Epoch Time Cycles to 2) process (not) syntax as instructions

- FILTERS
- Workflow

Sync Deltas Δδ

Artificial intelligence (AI) syntax refers to the set of rules, principles governing the arrangement of words and phrases in a programming language. In the context of AI and natural language processing, syntax ensures that language is structured in a systematic way, for effective communication and comprehension.

Understanding syntax is essential for developers to write readable, maintainable, and scalable code

Blockchain Quad-lemma

NET, Net of programmable $$$
Programming Reality Ground Truth
No Layers L0, L1, L2… only GENESIS EPOCH,
Follow on Epoch time cycles, intervals, cycles

"five layers of blockchain tech:
- Infrastructure hardware layer
- Data layer
- Network layer
- Consensus layer
- Application / presentation layers

Blockchain layers:
Layer 0
Layer 1
Layer 2
Layer 3

Scalable = AVAILABLE EPOCH TIME CYCLES

TIME EPOCHS = TEMPORAL LAYERS

Water drop
In pond Meme
USPTO
13/573,002

Genesis Epoch
Genesis +1
Genesis +2..

TEMPORAL LAYERS

Multi-chain ecosystems

Typical high-TPS chains

Δδ

TEMPORAL CONSENSUS
- Time Sync
- Stochastic harmonization

SYNTAX CONSENSUS
Brevity Codes

Decentralized

Traditional chains (BTC, ETH...)

Secure

TTL Time To Live

START

STOP

THESIS: All things internet, net of programmable money are formed using:

1. Time epochs created by oscillating quartz crystal silicon chips

2. Syntax used / not used as programming instructions during epoch time cycles

All things internet, internet of money, blockchains are formed by unicast, multicast, anycast protocols. Programmable money's improvements are in cryptography. The internet consists of unicast, multicast broadcast, anycast and workflow filters, publish – subscribe paradigms..

Blockchain = series of hashed blocks carrying transactional records. The first block of the blockchain is the Genesis block. After that, every new block added to the blockchain is linked to the Genesis block through a (temporal) iterative process.

Database Flat File

"BLOCKCHAIN" = LEDGER / Database

Database *flat file* sama dengan file data pada *spreadsheet* (misal MS Excel™), berupa satu file berisi baris-baris dengan jumlah kolom tetap yang disimpan berurutan dalam file.

NIP	Nama	Nama Depan	Telp
123-45-6789	Santoso	Heru	021-316-1234
987-65-4321	Purnama	Widya	022-543-9876
987-65-4321	Jackson	Michael	021-234-5678
567-89-0123	Iskandar	Dodi	021-987-6431

REPLACEMENT SHEET

BUILDING BLOCKS

TASK ON / OFF

MACRO CYCLES

219

.0001

MICRO CYCLES

216 218

201

B1: BUILDING BLOCK 1: TCP/IP HEARTBEAT TIME STAMP & DATA GET / PUT OF ORG ID / URN IN MICRO / MACRO CYCLES PRIOR TO DATA FUSION CENTER INSERTION

202 **FEDERATED GROUP JOINS, MERGE, ADDS, DROPS**

B2: BUILDING BLOCK 2: ADAPTIVE, CYCLIC, ITERATIVE PROCEDURAL TEMPLATES: XML ARTIFACTS i.e. UNIT TASK ORDER & K00.99 HEARTBEAT SYNC DELTA MESSAGES / STATE META DATA SNAPSHOTS IN NETWORK EXECUTION MANAGEMENT MARKUP OF SERVICE INTERFACE ARTIFACTS

TF BIZ

214

SYNC DELTA

213

215

LEADER"S INTENT DECISIONS

ADHOC / AGILE FEDERATED <ID> GROUPS SYNC'D IN TIME / SPACE

212

211

SNAPSHOTS

210

203

B3: BEACON TECH TYPE I: PAUL REVERE LINEAR, SEQUENTIAL HOP COUNTS

SYNC DELTA METRICS IN SLA CLAUSES AS MOE, MOP METER IN TAX CODES,TRANCHE CLASSES / RATINGS ARBITRAGE TRIGGERS

SEARCH FOLLOWED BY ARBITRAGE INVITES VIA BEACON NEWSCASTS. INVITE ACROSS SPACE / TIME

LENGTH, THRESHOLD, INTENSITY, DURATION

206

207

208

APPLIQUE' OVERLAYS

209

204

B4 BEACON TECH TYPE II: WATER DROP IN POND RADIUS, CIRCUMFERANCE GEO SPATIO-TEMPORAL

MAP VIEWS GEO-LOCATION SPECIFIC SHOW SYNC DELTAS BY GROUP / RESOURCE TYPE, EVENT CLASS / NEWSCAST BY TRANCHE <CLASSES>

REPLACEMENT GRAPHIC
PRECONDITIONS
135
137 "HEART BEACON CYCLE" 137
SOP - 3 PLAYBOOK
136
LITTLE LEAGUE COMMISSION
120
122
107
DIRECTORY PROCESS
101 + 102 +103.. 136 = 137
DATA FUSION CENTER
119
9C
134
DISPLAY BOARD
9B
9A
9
LEAGUES
132
105
8
109
108
109
DIRECTORY PROCESS
7
STATISTICIAN
6
CARD
RUNNER
CARD
STATISTICIAN
107
117
STATE PROCESS
106
STATE PROCESS
106
105
TEAMS
133
SECTION 1 LEAGUES
STORED DATA
114
OFF FIELD CONNECTOR
5B
125
129
121
120
122
LEAGUE HQ > TO COMMISSION
LOCAL: OCEANPORT NJ
<TEAM>
133
106
2A
107
STORED DATA
114
DISPLAY BOARD
134
3
4C
101
PLAYER
TEAM TASK ORDER TTO
118
110
115
5A
4B
DELAY
128
0
COACH
1
2B
109
108
102
127
2C
2C
MANAGER
2
127
4A
103
<ACTIVITY>
<TAG><TAG>
UMPIRE
0
0
104
3
5
122
5A
120
STATISTICIAN
106
107
105
4
REPORTS
111
RUNNER 108
SECTION 2 BENCH
UNEXPECTED EVENT
<RESOURCE>
<TAG>
110
N
131
13
126
N
CONCENTRIC
124
130
4
131
131
131
X
Y
Y
X
+ / -
SEQUENTIAL HOP COUNTS
123
113
T TIME
108
126
1 2 3 4
PRECEDENCE
112
RUNNER 108
HEARTBEAT GET / PUT
HEARTBEAT TIMESTAMP
SECTION 3 FIELDS

PLAYER
101
COACH
102
MANAGER
103
UMPIRE
104
STATISTICIAN
105
STATE PROCESS
106
DIRECTORY PROCESS
107
RUNNER
108
DATA
109
CARD
<ACTIVITY>
<EVENT>
<LOCATION>
<RESOURCE>
110
UNEXPECTED <EVENT>
111
112
HEARTBEAT TIMESTAMP
113
GET / PUT
STORED DATA
114
115
SYNC DELTA
ELEMENT TAGS
116
117
SEARCH
TEAM TASK ORDER TTO
118
DATA FUSION CENTER
119
120
MERGE
121
SORT
122
SUMMING FUNCTION
123
HOP COUNTS
124
AREA / CLUSTER
OFF FIELD CONNECTOR
125
126 SEQUENTIAL
+ / -
1 2 3 4
PRECEDENCE
PRECONDITIONS
135
DECISION
127
DELAY
128
129
OR
130
131
BASEBALL DIAMOND
LEAGUES
132
T
133
TEAM
MACRO CYCLE
136
SOP-3
STANDARD
OPERATIONS
PROCEDURES
PRECONDITIONS
PLAYBOOK
MICRO CYCLE
REPORTS: <SITREP>
<BASE COUNT> (HOPS)
<RBI> = ROUND BASE
<HITS> <TEAM RANK>
<TIMES AT BAT>
<BATTING AVERAGE>
<SCORE> <SPOT>
<PITCHER RATING>
<HASTY>
<DELIBERATE>
GREASE PENCIL
ACETATE DISPLAY BOARD
134
PREDEFINED PROCESS "HEART BEACON CYCLE"
137
TEAM IDENTIFIERS<TEAM ID>
in federated ID organizations
Alphabetical, numeric or both
TEAM TASK ORDERS <118>:
<JOIN> <ADD> <MOVE>
< MERGE> <HASTY - FRAG>
<SPLIT> <CHANGE> <DROP>
TEAM / LEAGUE TAGS
<COMMISSION> <LEAGUE>
<TEAM> <SHARED>
<PRIVATE> <JOINT>
PRECEDENCE / PRIORITY
<NULL 0> <ROUTINE 1>
<PRIORITY 2 > <IMMEDIATE 3>
<FLASH 4>
CONCENTRIC HOPS:
<GREEN = NULL>
< BLUE = 1>
<YELLOW = 2>
< ORANGE = 3>
< RED = 4>
PRECEDENCE
SALUTE-R: REPORT:
SIZE = # of Team Players
ACTIVITY = Playing Ball
LOCATION = grid location
UNIT = measure / metric
TIME = date and time
EQUIPMENT = bat, hat
RESOURCE: dues, water
TAG CLASS TYPES: URNz; Uniform Resource Name:
< EVENT> Tournament, Pre-planned, hasty = card fragment
< RESOURCE> Quantity Unit of Measure
< LOCATION > Geospatial, place specific
< ACTIVITY > Running bases as hops
< FREQUENCY> seconds, minutes, hours, days, weeks
< AREA> by # of grouped players, actors, teams, leagues
REPLACEMENT GRAPHIC

QUANTUM COMPUTING / HBC TIME – SPACE METER / METRICS

A particle 'P' in a 3-dimensional box, representing a simple quantum mechanical system.

Harmonic oscillator potential and wavefunctions

#QuantumComputing USct Alice Corp Vs CLS Bank compliant memes:
In quantum computing, a qubit (or quantum bit (sometimes qbit) is a unit of quantum information—the quantum analogue of the classical binary bit. A qubit is a two-state quantum-mechanical system, such as the polarization of a single photon: the two states are vertical polarization and horizontal polarization. In a classical system, a bit has be in one state or the other. Quantum mechanics allows a qubit to be in a superposition of both states at the same time, a fundamental quantum computing property

US Sct Alice Corp Vs CLS Bank Physical memes
Linear sequential "Paul Revere" meme = horizontal polarization
Vertical polarization vectors from a known point 0 null Sonar Hop meme

particle representation / samples

Instead of each bit having two potential states — on or off — a quantum bit or qubit has three. It can be on, off, or both, and you only know which one it is once you look at it. How can you tell if a bit of data is correct if looking at it might change its state?

STATE CHANGE EVENT

Microwave pulses like sonar ping…

silicon device movement is controlled through use of microwave pulses. As an electron spins up, a binary value of 1 is generated, when the electron spins down, a binary value of 0 is generated.

Fock state number state quantum state that is an element of a Fock space with a well-defined number of particles (or quanta)

Humanitarian Assistance Networked Donor System

JBFSA "PAINT IT A DIFFERENT COLOR" Joint Blue Force Situational Awareness

FEDERATED MISSION NETWORKING FMN FEDERATE ★ SHARE ★ WIN — REGIONAL

GLOBAL

SYSTEM Of SYSTEMS

H.A.N.D.S: "Based on the need to speed up the processes of influencing an adversary, new concepts result in the adaptation of military doctrine, organization, training, material, infrastructure, interagency interaction, leadership, personnel and facilities"… German Bundeswehr concept of "OOTW Operations Other Than WAR or "Vernetzte Operationsführung" circa 2003

"Shared situational awareness enables collaboration synchronization, and enhances sustainability, speed of command"

300 +TEMPLATES STUCTURED DATA EXCHANGE

STRUCTURED DATA FFUIRNS FFUDNS OPSCODES MAPPED TO SYMBOL SETS

WORLDBEYONDWAR.org a global movement to end all wars

Neural Net

Reuse adaptive procedural template guides from Battlefield Digitization among a federated systems of systems improving synergy, synchronicity to achieve shared sustainable goals

DOD SITUATION AWARENESS PROGRAM SWORDS TO PLOWSHARES OOTW IDEA BY GERMAN MILITARY CIRCA 2003

OFF SHORE OUTER BANKS

Vernetzte Operationsführung

Closer < $$$ < FUEL

HEART BEACON CYCLE {"RWA"}

COMMODITIES ISO

Series of systemic actions to achieve goals ex: form, maintain ECO sustainable Trade Federations i.e., closer = < fuel, CO2

PROCEDURAL TEMPLATE

List Items point / refer to detailed treatises

{"Org_ID"}
{"URN"}
{"URN"}

Federation Gateway

Off Site connect

PROXIMITY BEACONS

Cloudcenter

TARIFF ZONE CALCULATION

Sync to Closest Heartbeat

Δ δ

ΣX

A continuous action, operation, or series of changes, sync deltas i.e., price indexes

Firefly-Heartbeat Algorithm

{"EVENT_BUS"}

Universal Event Bus Algorithm

Process Events by Precedence

Flash Heartbeat

</108> messages

{"Org_ID"}

Sync geo-spatial temporal Eco econometrics across space-time

{"URN"}{"URN"}

MINIMUM LIST OF COMPONENTS / BUILDING BLOCKS, PROCESSES, PROCEDURES… AGREED ON BY TRADE FEDERATIONS TO ACHIEVE DAO DISTRIBUTED AUTONOMOUS ORGANIZATIONS CONSENSUS

DAO's in FEDERATIONS AGREE TO USE COMMON COMPONENTS, SHARED PROCESSES, METHODS, SIGNALING - TELEMETRY SCHEDULE & METRICS IN SMART CONTRACTS, SERVICE LEVEL AGREEMENTS

CHECKLIST: TRADE FEDERATION ECONOMIC FRAMEWORK EX:

1) Organization Identifiers {"Org_ID"} routing / organizing
2) Track RWA Real World Assets / Commodities by </URN>
3) DISTRIBUTED STATE MACHINE SNAPSHOTS @ 15 / N min
4) TARIFF TOOL ZONE CALCULATION w Space – Time Metrics
5) Use NIST Quantum Random Number Beacon QRNB

USPTO 13/573,002 = Spaceship Earth's Signals & Telemetry Annex

QFS Quantum Financial System / TRC

DEFI FINTECH
IP WARS / Litigation
Foundation Tech

SWORDS
to
PLOWSHARES

USPTO 13/573,002
573 U.S. 134 SCt 2347
Alice in Wonderland Ruling

Symbols
Rule
The World
OPSCODE
BREVITY
CODES
Mapped
To symbols
2525A,C D

- Battlefield Digitization, Net Centric Warfare for OOTW Operations Other Than War
- Net, Net of $$$ Foundation Tech
- Structured Data Exchange with 300 + use cases
- Distributed State Machine
- Use Cases: A.I., Big data, Quantum
- Blockchain, Distributed Ledger Tech
- DAO Distributed Autonomous Organization

Consensus, Signals, Telemetry, Standards

Structured Data

SYNC DELTA
DATA SNAPSHOTS
Δ δ

In the beginning (of time)..
There was the word (syntax)

Net, Net of $$$ money consists:
1) Epoch Time Cycles
2) Syntax used / not in epochs
3) Wave form motion (sound)

MEMO #1421

HFT START, STOP, Time to LIVE

Economics of Microtransactions in Video Games: The Intelligent Economist

Microtransactions: in-game purchases that unlock specific features or give user special abilities, characters or content. Q: is the main purpose of the (technically non-existent) **#blockchain** derived from the video game industry adapted to #cryptocurrency industry is about adding/ overlaying **#micropayments / #microtransactions** converting the world into a massive, virtual open world video game ? https://intelligenteconomist.com/microtransactions/

Structured Data Exchange

SYNTAX LEXICON
ROSETTA STONE

Coder's Guide

lexicon

STRUCTURED <CONTENT> EXCHANGE TEMPLATES

MIL STD 2525ABC

ASSET TOKENS

"SYMBOLS RULE THE WORLD"

STRATML

XAML

xBRL

BINARY XML

UBL

DDL DATA DEFINITION LANGUAGE

TOSCA

YAML

Signal operating instructions (SOI): technical control coordination of signaling, telemetry Current situational awareness, data dictionary, network identification, channels, network directory, brevity code-words, signals. Units maintain 2 SOI copies: PEACE TIME version "Go-To-War" version = BIZ COA (s) <Org_ID1><Org_ID2><Org_ID3>

INFOCON 5 4 3 2 1 INFORMATION CONDITION

NATO MESSAGE TEMPLATES USE DATA SETS FOR STRUCTURED DATA EXCHANGE // POSITION FIELD IN MESSAGE PROCESSED BY TABLE, FIELD # IN A CONSISTENT, PREDICTABLE ORDER = AI FRIENDLY M2M

AI

GOAL: vide a common lexicon / syntax / term library used among FEDERATIONS identified by Federated ID

GOAL: Provide a common, consistent, reliable schedule to share signaling and telemetry within federations.

MTL Machine Trust Language

vector {"URN"{"URN"} {"TRANSACTION ID"}

MESSAGE TEXT FORMAT :

SEG RPT OCC CLASSNAME SETID SEQ FIELD OCCURRENCE SET FORMAT NAME

O 11NUPRES EXER 1 /M /O // (NU) EXERCISE IDENTIFICATION

C 11NUPRES OPER 2 /M /O /O /O // (NU) OPERATION CODEWORD

M MIOPV1 1 MSGID 3 /M /M /O /O /O /O // (NU) MESSAGE IDENTIFIER

M MIP OUT ORDPLAN 4 /M /O /O /O // (NU) PLAN ORDER REFERENCE

SIOP

POUT MSGREF 5 /M /M /M // (NU) REFERENCED MESSAGE

NUPRES DTG 6 /M // (NU) DATE-TIME GROUP

0 ORGID 7 /M /M /M /M /M /M /M /M /M /C // (NU) ORGANIZATION DESIGNATOR

M 11NUPRES GENTEXT 8 /M /M // (NU) 1.A ENEMY FORCES / COMPETITORS

M 11NUPRES GENTEXT 9 /M /M // (NU) 1.B FRIENDLY FORCES / TRADE FEDERATION

M 11NUPRES GENTEXT 10 /M /M // (NU) 1.C ATTACHMENT / DETACHMENT

O 11NUPRES GENTEXT 11 /M /M // (NU) 1.D COMMANDERS EVALUATION

O 11NUPRES GENTEXT 12 /M /M // (NU) 1.E ENVIRONMENTAL INFORMATION

M 11NUPRES GENTEXT 13 /M /M // (NU) 2. MISSION

M 11NUPRES GENTEXT 14 /M /M // (NU) 3.A CONCEPT OF OPERATION

O 11NUPRES GENTEXT 17 /M /M // (NU) (3) RECONNAISSANCE SURVEILLANCE

O 11NUPRES GENTEXT 21 /M /M // (NU) (5) INFORMATION OPERATIONS

O 11NUPRES GENTEXT 28 /M /M // (NU) (5) COMMS INFORMATION SYSTEMS

O 11NUPRES GENTEXT 35 /M /M // (NU) 3.D COORDINATING INSTRUCTIONS

M 11NUPRES GENTEXT 36 // (NU) 4.A SUPPORT CONCEPT (Logistics)

M 11NUPRES GENTEXT 37 /M // (NU) 4 ATERIEL AND SERVICES

DICAL EVAC & HOSPITALISATION

L - MILITARY OPERATIONS

SYMBOLS	Friend	Neutral	Hostile
	Partner		Competitor

TOKENIZED ECONOMY BREVITY CODE OPSCOSE MAPPET TO SYMBOLS

INDEX REFERENCE #:
M015 STATUS :
EFFECTIVE: 14-DEC-99

PURCHASE CODES

FEDERATED PEGS

{"URN"} {"ASSET_CLASS"}
{"URN"} {"ASSET_TYPES"}

DISTANCE

NDN

INTEREST

ISO 10383 – MIC
Market Identifier Codes

DAO

INTEREST

{"URN"}

{"Org_ID"}

</108>K00.99 / FIX / SWIFT / E-911 Heartbeat Message

STOCK EXCHANGE MIC CODES

NDN NAMED DATA NETWORKING PRECEDENCE PROCESSING

FILTERS

BLOCKTIME
ARBITRAGE
ERLANG
TIME
EQUATIONS

FROM	TO: GCCS-A	TAIS	ASAS	AMDPCS	AFATDS	MCS
ASAS	C002 C203 F002 F014 F015 F541 S201 S309	C002 C203		C002 C203	C002 C203 F014 F541 S305 S309	C002 C203 E400 F002 F014 F015 F541 S201 S309 S507
AMDPCS					F002 F015 S201	C203 C400 D630 E500 F002 F014
AFATDS	F002 F014 F015 F541 S201					
MCS	A423 C203 C505 F002 F014 F015 F541 S201	A423 A659 C002 C203 C400 C443 C447 C488 C501 C503 C504 C505 C506 C507 C508 E400 F002 F014 F015 F541 F658 F756 G489 K01.1 S201 S303 S507	A423 A659 A656 A690 C002 C203 C400 C505 F002 F014 F015 F541 S201		A423 C505 F014 F015 F541 S201	

CODE GUIDE

TOKENS

OPSCODE BREVITY CODES

USMTF / XML MTF FORMATTED MESSAGE CATALOG = 300 + messages info exchange sets using common, CONSENSUS Message Text Formats MTFs. MTFs specify </CONTENT> / info agreed by group consensus presenting information in a logical, well specified unambiguous layout resulting in a highly efficient info payload to overhead ratio

A.I.

INFOCON 5 4 3 2 1 INFORMATION CONDITION

SIOP

ASSET TOKENS Token Economy

Rosetta Stone

Syntax Lexicon

Coder's Guide

M2M

"SYMBOLS RULE THE WORLD"

Information Elements Roles

- COI Determination Org Interaction
- Search and Discovery
- Ontologies STANDARDS
- Taxonomies REFERENCE
- Metadata Attributes / Filters

('Org_ID"} {"URN"} </URN></URN> FILTERS

FFUDN: Field Format Unit Designator #

FFIRN Field Format Index Reference #

Structured military messaging ID's messages, message sets, data element, symbol fields **</108>**

BY Form Field Position & NUMBER

{"108"}

NDN

Firefly-Heartbeat Flash Messages

PROCESS MESSAGE BY PRECEDENCE

UNIVERSAL EVENT / ALERT MESSAGE BUS

MESSAGE CATALOG

300 + Use Cases

Data Elements: entity, attribute, relationship equivalents

HEARTBEAT MESSAGE = K00.99 </108> {"108"}

Object Categories	Examples	Information Categories and Examples: Location	Movement	Identify	Status	Activity	Intent
OOB	**SYNTAX LEXICON**	STRUCTURED DATA EXCHANGE Message Sets					
		lat/long	spd/hdg	country / alliance, type/class	readiness	targeting, reconitering	COA {"Java JS"}
		Machine Trust Language MTL			CDL Contract Description Language		YAML
Infrastructure	Comm, power, transportation, water/sewer	network, grid	throughput, flow rates,	name, part-of relationships	BDA, op levels	repair, broadcasts	expansion plans
Sociological	Culture, religion, economic, ethnic, government, history, languages	temples, historic structures					
Geophysical	Terrain, weather, climatology, oceanography, astrometry	feature lat/long, alt/dpth					

E-R Model	Class Diagram	Relational Database	Object DBMS	XML DTD / Schema	TADILs	MTF
Entity	Class	Table	Class	Element	Message	Message
Attribute	Attribute	Field / Column	Attribute	Child Element or Element Attribute	DFI	FFIRN / FFN / FUDN
Domain Value	PURCHASE CODES	Instance, Value	**TOKENS**		DUI	FUD

OPERATIONAL NODES / ACTIVITIES

DATA SYSTEM FUNCTIONS PERFORMANCE

11.4 - Classification
11.4.1 - Category
11.4.1.1 - Confidence Level
11.4.1.2 - Estimate Type
11.4.1.2.1 - Alternative
11.4.1.2.2 - Evaluated D
11.4.1.3 - Value
11.4.1.3.4 - Subsurface
11.4.1.3.5 - Surface
11.4.2 - Platform / Point / Fea ture Type
11.4.3 - Specific Type
11.4.4 - Type Modifier
11.4.5 - Unit

11.8 - Kinematics
11.8.1 - Pos / Vel / Acc (PVA)
11.8.1.1 - Acceleration
11.8.1.1.1 - Angular
1.1.2 - Linear
2 - Estimate Type
1.2.1 - Estimated
1.2.2 - Observed
1.2.3 - Predicted
4 - Velocity
1.4.1 - Horizontal
1.4.2 - Vertical
VA Confidence
1 - Bearing Angle
2 - Bearing Angle Rate
3 - Covariance Matrix

PURCHASE CODES

SYMBOL	Friend	Neutral	Hostile
2525C	Partner		Competitor

MIL STD 2525A, B, C, D

</URN>

{"Org_ID"}

ISO

20022

Patent Application 9/11 2003: Method to commercialize structured military messaging

DoD Systems of Systems Engineering Structured Data Exchange MIL Standards / ISO Standards

BREVITY OPSCODES MAPPED TO SYMBOLS, SYMBOL SETS FOR A.I. ARTIFICIAL INTELLIGENCE MAN – MACHINE INTERFACE

STANDARD, CONSISTENT SYMBOLS

Structured Data Exchange

SYNTAX LEXICON ROSETTA STONE

Coder's Guide

lexicon

STRUCTURED <CONTENT> EXCHANGE TEMPLATES

MIL STD 2525ABC ASSET TOKENS

"SYMBOLS RULE THE WORLD"

Signal operating instructions (SOI): technical control coordination of signaling, telemetry Current situational awareness, data dictionary, network identification, channels, network directory, brevity code-words, signals. Units maintain 2 SOI copies: PEACE TIME version "Go-To-War" version = BIZ COA (s) <Org_ID1><Org_ID2><Org_ID3>

INFOCON 5 4 3 2 1 INFORMATION CONDITION

NATO MESSAGE TEMPLATES USE DATA SETS FOR STRUCTURED DATA EXCHANGE // POSITION FIELD IN MESSAGE PROCESSED BY TABLE, FIELD # IN A CONSISTENT, PREDICTABLE ORDER = AI FRIENDLY M2M AI

GOAL: vide a common lexicon / syntax / term library used among FEDERATIONS identified by Federated ID

GOAL: Provide a common, consistent, reliable schedule to share signaling and telemetry within federations.

MTL Machine Trust Language

vector {"URN"{"URN"} {"TRANSACTION ID"}

MESSAGE TEXT FORMAT :

SEG RPT OCC CLASSNAME SETID SEQ FIELD OCCURRENCE SET FORMAT NAME

O 11NUPRES EXER 1 /M /O // (NU) EXERCISE IDENTIFICATION

C 11NUPRES OPER 2 /M /O /O /O // (NU) OPERATION CODEWORD

M MIOPV1 1 MSGID 3 /M /M /O /O /O /O // (NU) MESSAGE IDENTIFIER

M MIP OUT ORDPLAN 4 /M /O /O /O // (NU) PLAN ORDER REFERENCE

POUT MSGREF 5 /M /M /M // (NU) REFERENCED MESSAGE

NUPRES DTG 6 /M // (NU) DATE-TIME GROUP

O ORGID 7 /M /M /M /M /M /M /M /M /M /C // (NU) ORGANIZATION DESIGNATOR

M 11NUPRES GENTEXT 8 /M /M // (NU) 1.A ENEMY FORCES / COMPETITORS

M 11NUPRES GENTEXT 9 /M /M // (NU) 1.B FRIENDLY FORCES / TRADE FEDERATION

M 11NUPRES GENTEXT 10 /M /M // (NU) 1.C ATTACHMENT / DETACHMENT

O 11NUPRES GENTEXT 11 /M /M // (NU) 1.D COMMANDERS EVALUATION

O 11NUPRES GENTEXT 12 /M /M // (NU) 1.E ENVIRONMENTAL INFORMATION

M 11NUPRES GENTEXT 13 /M /M // (NU) 2. MISSION

M 11NUPRES GENTEXT 14 /M /M // (NU) 3.A CONCEPT OF OPERATION

O 11NUPRES GENTEXT 17 /M /M // (NU) (3) RECONNAISSANCE SURVEILLANCE

O 11NUPRES GENTEXT 21 /M /M // (NU) (5) INFORMATION OPERATIONS

O 11NUPRES GENTEXT 28 /M /M // (NU) (5) COMMS INFORMATION SYSTEMS

O 11NUPRES GENTEXT 35 /M /M // (NU) 3.D COORDINATING INSTRUCTIONS

M 11NUPRES GENTEXT 36 /M /M // (NU) 4.A SUPPORT CONCEPT (Logistics)

M 11NUPRES GENTEXT 37 /M /M // (NU) 4 ATERIEL AND SERVICES

DICAL EVAC & HOSPITALISATION

- MILITARY OPERATIONS

INDEX REFERENCE # M015 STATUS

EFFECTIVE: 14-DEC-99

PURCHASE CODES

FEDERATED PEGS {"ASSET_CLASS"} {"ASSET_TYPES"}

DISTANCE NDN INTEREST DAO INTEREST {"URN"} {"URN"} {"URN"} {"Org_ID"}

ISO 10383 – MIC Market Identifier Codes

STOCK EXCHANGE MIC CODES

NDN NAMED DATA NETWORKING PRECEDENCE PROCESSING

FILTERS

BLOCK TIME ARBITRAGE ERLANG TIME EQUATIONS

SYMBOLS	Friend	Neutral	Hostile
	Partner		Competitor

TOKENIZED ECONOMY BREVITY CODE OPSCOSE MAPPET TO SYMBOLS

FROM	TO					CODE GUIDE
	GCCS-A	TAIS	ASAS	AMDPCS	AFATDS	MCS
ASAS	C002 C203 F002 F014 F015 F541 S201 S309	C002 C203		C002 C203	C002 C203 F014 F541 S305 S309	C002 C203 E400 F002 F014 F015 F541 S201 S309 S507
AMDPCS					F002 F015 S201	C203 C400 D630 E500 F002 F014
AFATDS	F002 F014 F015 F541 S201					
MCS	A423 C203 C505 F002 F014 F015 F541 S201	A423 A659 C002 C203 C400 C443 C447 C488 C501 C503 C504 C505 C506 C507 C508 E400 F002 F014 F015 F541 F658 F756 G489 K01.1 S201 S303	A423 A659 A656 A690 C002 C203 C400 C505 F002 F014 F015 F541 S201	A423 C505 F014 F015 F541 S201		

TOKENS

OPSCODE BREVITY CODES

USMTF / XML MTF FORMATTED MESSAGE CATALOG = 300 + messages info exchange sets using common, CONSENSUS Message Text Formats MTFs. MTFs specify </CONTENT> / info agreed by group consensus presenting information in a logical, well specified unambiguous layout resulting in a highly efficient info payload to overhead ratio

A.I.

INFOCON 5 4 3 2 1 INFORMATION CONDITION

SIOP

ASSET TOKENS Token Economy

Rosetta Stone

Syntax Lexicon

Coder's Guide

M2M

"SYMBOLS RULE THE WORLD"

Inform

- COI D
- Searc
- Ontol
- Taxon
- Metad

('Org_ID

FFUDN:

XBRL BINARY XML

UBL

DDL DATA DEFINITION LANGUAGE

STRATML XAML

TOSCA YAML

FFIRN Field Format Index Reference #

Structured military messaging ID's messages, message sets, data element, symbol fields </108>

BY Form Field Position & NUMBER

{"108"} NDN

Firefly-Heartbeat Flash Messages

PROCESS MESSAGE BY PRECEDENCE

UNIVERSAL EVENT / ALERT MESSAGE BUS

MESSAGE CATALOG 300 + Use Cases

Data Elements: entity, attribute, relationship equivalents

HEARTBEAT MESSAGE = K00.99 </108> {"108"}

Object Categories	Examples	Information Categories and Examples: Location	Movement	Identify	Status	Activity	Intent
OOB	SYNTAX LEXICON	STRUCTURED DATA EXCHANGE Message Sets					
		lat/long	spd/hdg	country / alliance, type/class	readiness	targeting, reconitering	COA {"Java JS"}
		Machine Trust Language MTL			CDL Contract Description Language		YAML
Infrastructure	Comm, power, transportation, water/sewer	network, grid	throughput, flow rates,	name, part-of relationships	BDA, op levels	repair, broadcasts	expansion plans
Sociological	Culture, religion, economic, ethnic, government, history, languages	temples, historic structures					
Geophysical	Terrain, weather, climatology, oceanography, astrometry	feature lat/long, alt/dpth					

E-R Model	Class Diagram	Relational Database	Object DBMS	XML DTD / Schema	TADILs	MTF
Entity	Class	Table	Class	Element	Message	Message
Attribute	Attribute	Field / Column	Attribute	Child Element or Element Attribute	DFI	FFIRN / FFN / FUDN
Domain Value	PURCHASE CODES	Instance, Value	TOKENS		DUI	FUD

OPERATIONAL NODES / ACTIVITIES

DATA SYSTEM FUNCTIONS PERFORMANCE

11.4 - Classification

11.4.1 - Category

11.4.1.1 - Confidence Level

11.4.1.2 - Estimate Type

11.4.1.2.1 - Alternative

11.4.1.2.2 - Evaluated D

11.4.1.3 - Value

11.4.1.3.5 - Surface

11.4.2 - Platform / Point / Fea

11.4.3 - Specific Type

11.4.4 - Type Modifier

11.4.5 - Unit

11.8 - Kinematics

11.8.1 - Pos / Vel / Acc (PVA)

11.8.1.1 - Acceleration

11.8.1.1.1 - Angular

11.8.1.2 - Linear

11.8.2 - Estimate Type

11.8.2.1 - Estimated

11.8.2.2 - Observed

11.8.2.3 - Predicted

11.8.2.4 - Smoothed Data

11.8.3 - Position

11.8.3.1 - Bearing Angle

11.8.3.2 - Location; 2D Hor

11.8.3.3 - Vertical

11.8.4 - Velocity

11.8.4.1 - Horizontal

11.8.4.2 - Vertical

11.8.4.3 - Confidence

11.8.4.4 - Bearing Angle Rate

11.8.4.5 - Covariance Matrix

PURCHASE CODES

SYMBOL	Friend	Neutral	Hostile
2525C	Partner		Competitor

Encyclopedia Britannica: "Language is a SYSTEM of SIGNS having meaning by convention. In this sense, language need not be confined to the spoken word".

"SIGNS AND SYMBOLS RULE THE WORLD, NOT WORDS OR LAWS"

CONFUCIOUS

USPTO 13/573,002
573 U.S. 134 SCt 2347
"Alice in Wonderland Ruling"

World Game Great Reset

Signals Telemetry Annex K

WORLDCOIN
USDe
FEDCOIN

DeFI
GDP INDEX
K% RULE
Eco Econ Incentives
TIME- SPACE METRICS METERS

HEARTBEAT % REAL GDP
("108")
ALGORITHMIC REGULATION

Net, net of money $$$ formed w:

1. Epoch time cycles created by silicon chips
2. Syntax code instructions in epoch time cycles
3. Time Stamp Server w/event message bus

Brevity Codes
UTZ Sync
#1421
I.R.S.
{"108"}

SYMBOL SETS
Man-Machine

NAMED DATA NETWORKING

GENESIS EPOCH | EPOCH +1 | EPOCH +2 | Δ δ Sync Deltas

NET OF MONEY formed by 1) Time Cycles 2) Syntax

← cycle n → ← n + 1 → ← n + 2 →

NIST Beacon
A Public Randomness Service
Non Repudiation
URN
Org_ID
Time Stamp Server
Time Series Databases

Syntax lexicon comprised of 300 +
Structured data messages, message sets =
Comprehensive list of use cases, data elements supporting Internet of Everything IoE net of value. Reference guide, data dictionary standards support
Data elements mapped to SYMBOL SETS

SOUND / LIGHT e.g., Q.R.N.B. QUANTUM COMPUTING @ ROOM TEMPERATURE

SOUND WAVES = INTEROP

UTC SYNC
SYNC DELTA
Data Snapshots
</URN> </URN>
TIMESTAMP SERVER
</Org_ID>
</Org_ID>

TIME CHAIN

EIN/UTZ
URN
Org_ID
Heartbeat Flash Message Event Bus
STAT MEAN INDEX
Sync to Closest Heartbea
STATE META DATA Snapshot SYNC DELTAS
TIME
SPACE

Ideas Alpha-Numeric
Brevity Codes / Tokens
"Bitcoin is a language"
STRUCTURED DATA EXCHANGE
LEXICON CODER's GUIDE
ISO 20022 2525C,D
NATO NETOPS
DATA SETS TEMPLATE FORMS
"LOGIC" "FILTERS"
Message Sets
XBRL / CDL / DAML
Alpha Numeric Brevity Codes K00.99
ROSETTA STONE

STRUCTURED DATA – SYMBOLS

ISO 20022 dummies
SYNTAX LEXICON
SPACE – TIME Metrics

BLOCKCHAIN CONSENSUS ALGORITHMS
ULTIMATE GUIDE FOR BEGINNERS
Proof-of-Work
Proof-of-Weight
Proof-of-Stake
Delegated Proof-of-Stake
Leased Proof-Of-Stake
Proof of Elapsed Time
Practical Byzantine Fault Tolerance
Simplified Byzantine Fault Tolerance
Delegated Byzantine Fault Tolerance
Directed Acyclic Graphs
Proof-of-Activity
Proof-of-Capacity | Proof-of-Burn
BLOCKCHAIN CONSENSUS ALGORITHMS
SOURCE: https://developcoins.com/blockchain-consensus-algorithms

STAT MEAN VALUE INDEX
CONTRIBUTIONS TO STATISTICS
Price Indexes in Time and Space
Methods and Practice
SchellingPoint

SOUND WAVES enable Different types of quantum tech to "talk"

BITCOIN TRANSACTION AKIN TO LAND ORG_ID in CLEAR / Person ID encrypted

'wave-particle duality is simply the quantum 'uncertainty principle'

"BLOCKCHAIN"

CUBE = SOURCE OF ALL FORM

TIME EPOCHS & SYNTAX = FOUNDATION TECH

USPTO 13/573,002 The Heart Beacon Cycle Time – Space Meter / Adaptive Template

EPOCH EPOCH EPOCH Δδ

NET OF $ formed by 1) Time Cycles 2) Syntax

cycle n → n+1 → n+2 →

SCOTUS Alice in Wonderland Ruling 2014

ABSTRACTIONS MAY NOT BE CLAIMED:

Chain Abstraction: Simplifying the Complex World of Blockchain

The Net, Net of Money (Cryptocurrency) Does not have / has no:

- LAYERS i.e., seven layer internet model
- BLOCKS on the BLOCKCHAIN
- Blockchain data stored in a CUBE
- - QUBIT (S) quantum two state system
- - Packets i.e., Vinton Cerf's "ode to a packet"

Nikola Tesla "All is wave form motion"

Lightchain AI introduces Proof of Intelligence (PoI), consensus mechanism designed to reward nodes for performing AI computations i.e., model training, inference, optimization...

INTERNET, NET OF $$$ TRUTH = WAVE FORMS

All computing is essentially workflow logic If, then, else then do {'task"} multicasted, Unicasted, anycasted / filtered over TCP / IP

Qbert pondering qubits

QUBITS STORED ON A BLOCKCHAIN

Qubit vs bit: Qubits are represented by a superposition of multiple possible states. A qubit uses the quantum mechanical phenomena of superposition to achieve a linear combination of two states. A classical binary bit can only represent a single binary value, such as 0 or 1, meaning that it can only be in one of two possible states. A qubit, however, can represent a 0, a 1, or any proportion of 0 and 1 in superposition of both states, with a certain probability of being a 0 and a certain probability of being a 1.

Q: ARE WE ABSOLUTELY CERTAIN QUBITS EXIST ?

Q: IF CUBITS DO NOT EXIST, THEN ARE THEY SIMPLY A WAY TO ACHIEVE GROUP THINK FASTER ???

Q: 1/3 of an event (transaction) ... really ???

ABSTRACT VS NATURE: 573 U.S. 134 SCt 2347

"BITCOIN's VALUE = TIME ITSELF"

TIME IS SPECIFIED IN UNITS OF BLOCK TRANSACTION CONFIRMATION TIMES"

FISHER INFORMATION FLUX FLOWS

ACOUSTIC PHONON

in-phase motion of neighboring ions in a lattice vibration

SOUND / LIGHT e.g., Q.R.N.B. QUANTUM COMPUTING @ ROOM TEMPERATURE

SOUND WAVES = INTEROP

Net of $$$ formed with:

1 EPOCH TIME CYCLES

2 {"Syntax"} "The Word"

"In the Beginning" Genesis Block

"All things internet, Internet of money are formed using time epoch cycles to process, parse, syntax as instructions"

"A blockchain is a consensus-based system. It only works if all nodes reach an identical state"

SOUND WAVES enable
Different types of quantum tech to "talk"

BITCOIN TRANSACTION AKIN TO LAND
ORG_ID in CLEAR / Person ID encrypted

'wave-particle duality' is simply the quantum 'uncertainty principle'

OPSCODE
BREVITY CODES
MAPPED TO
SYMBOLS for
A.I. Man =
machine
Interface

TIME EPOCHS & SYNTAX = FOUNDATION TECH

USPTO 13/573,002 The Heart Beacon Cycle Time – Space Meter / Adaptive Template

Numismatics: study of currency

Marcus Aurelius

Legend: IMP. M. ANTONINVS AVG. TR. P. XXV.

Terra Trade Reference Currency TRC "world currency" Bernard A. Lietaer Belgian economist proposed 1991 Basket of 9-12 most important commodities. Public issued demurrage fees for storage, shipping, handling..

BRONZE / LEAD / AES SIGNATUM AES GRAVE / SILVER / LEAD / IRON..

Unlike most modern coins, Roman coins had (at least in the early centuries) significant intrinsic value. However, while the gold and silver issues contained precious metals, the value of a coin could be slightly higher than its precious metal content, so they were not, strictly speaking, equivalent to bullion. Also, over the course of time the purity and weight of the silver coins were reduced.[15] Estimates of the value of the denarius range from 1.6 to 2.85 times its metal content,[citation needed] thought to equal the purchasing power of 10 modern British pound sterling at the beginning of the Roman Empire to around 18 pound sterling by its end (comparing bread, wine, and meat prices) and, over the same period, around one to three days' pay for a legionary.[16]

SIGNALS & TELEMETRY ANNEX K

Buckminster Fuller 1968 *Operating Manual for Spaceship Earth*
"we can make all of humanity successful through science's world-engulfing industrial evolution. We have the tools"

"The Dymaxion Map reveals a One-World Island in a One-World Ocean" which helps us to view the world as one interdependent system [of systems] of relationships. This is what is most fundamentally at HEART when we speak of Spaceship Earth "The planet is a [system of] system (s)"

SPACESHIP EARTH: comprehensive planetary planning describing new strategies intended to enable all of humanity to live with freedom, comfort and dignity, without negatively impacting the earth's ecosystem's regenerative ability

INFOCON 5 4 3 2 1 INFORMATION CONDITION

GDP INDEX ECONOMY

K % RULE {"108"}

INCENTIVIZE SUSTAINABLE Eco-Econometrics

TARIFF CHANGE

SLA / O

The Book Spaceship Earth relates Earth to a spaceship flying through space. Our spaceship has a finite amount of resources and cannot be resupplied.

Price Indexes in Time and Space

SCHELLING POINT

NIST Beacon A Public Randomness Service

NON_ REPUDIATION

Algorithmic Regulation

Stat Mean Value Index

Crypto Currency

Micro Payments

Demurrage Fees

The HEART BEACON CYCLE SIGNALING, TELEMETRY ANNEX K OPORD BUCKMINSTER FULLER'S OPERATING MANUAL for SPACESHIP EARTH

FIREFLY SYNC PULSE MATCH TO CLOSEST HEARTBEAT CYCLE

Spatial Econometrics

UNUSED RESOURCES

NEURAL NET A.I. WORLD COMPUTER

UNIVERSAL EVENT / ALERT Message BUS

Trade w Earth ???

UNMET NEEDS

COMMODITIES

vector

{"URN"}

{"Org_ID"}

ENERGY / DATA PULSE

ENERGY TOKENS

ENERGY ATTENUATES

CLOSER = CHEAPER

CLOSER= LESS FUEL

< Co2 emissions

TESLA

Firefly Heartbeat Algorithm

BIOCOIN

START

Our Spaceship Earth

one island in one ocean .... from space

TTL

STOP

Heartbeat Flash Messages

- Reuse, mod of System of systems engineering framework, Syntax Lexicon Library data elements
- STRUCTURED DATA EXCHANGE Reuse brevity codes mapped to 2525D symbol sets comprised of 300 + message sets for A.I. - machine Block-Time DLT arbitrage among Trade Federations </Org_ID> {"URN"} </URN> = COMMODITY

Spatial / temporal UTZ synchronization, stochastic harmonization, Time - Space Distance Estimation Service Common Consensus Algo meme Eco sustainable incentives

"We can synchronize ourselves, DAO Trade Federations in time - space for common purposes" Eco sustainable, Equitable Economic econometrics.

DISTRIBUTED AUTONOMOUS ORGANIZATIONS DAO

Heart Beacon Cycle

FEDERATE / TRADE FEDERATIONS

ECONOMIC HEARTBEAT

K %

DAO

BITNATION

GOVERNANCE 2.O

FEDERATE

SHARE

WIN

{"URN"}

{"Org_ID"}

1. FEDERATION: Latin: foedus, foederis, covenant, union of partially self-governing states or regions under a central (federal) government
2. A league or confederacy. Individuals / groups retain AUTONOMY
3. A federated body formed by nations, states, and… unions

each retaining control of internal affairs

FEDERATION CONSENSUS ALGORITHM / PROTOCOL LIQUIDITY ON DEMAND

ripple

Federation Gateway

{"GLOBAL"}
{"SHARED"}
{"DOMAIN"}
{"COMMUNITY"
{"PRIVATE"}
</ORG_ID>
{"GROUP ID"}

SYSTEMATIC

Net joins, drops, splits, merges, moves

Agile, adhoc NETOPS Vs acquisition preserves the CHANNEL

Bitcoin Group Signatures Dynamic Membership Multi-party Signature DMMS: independent interest within group signatures – FEDERATED ID {"Org_ID"}

Bitcoin Mining Pools

MEME / METAPHOR MEDIATION

BITCOIN MINER

BLOCK

EVENT BUS

DISTRIBUTED AUTONOMOUS ORGANIZATION = DAO RAND Corp

term coined circa 1991 now in use by Blockchain tech corporations

Uniform_Resource_Name

FIREFLY FLASH

HEARTBEAT MESSAGES

DeFi

Ve

TOKEN FCONOMY

VeriDAO

SKYNET

Signaling, Telemetry

IeT DEVICE / PLATFORM

IoT SENSOR DEVICE

{"Asset_Type"}

</RESOURCE> {"URN"}

{"Asset_Class"} </URN>

UUID 123e4567-e89b-12d3-a456-426655440000
123e4567-e89b-12d3-a456-426655440001
123e4567-e89b-12d3-a456-426655440002

STOCK EXCHANGE

MIC MARKET IDENTIFIER

CODES / BREVITY CODES

QR CODE

{"DUNS #"}{"Org_ID"}

{"URN"{"URN"}{"URN"}

Heartbeat Snaps

MICRO-CYCLES

FEDERATE: COMMON GOALS SYNCHRONIZED IN SPACE - TIME

Net of $$$ formed with:

1 EPOCH TIME CYCLES

2 {"Syntax"} "The Word"

"In the Beginning" Genesis Block

"Bitcoin is a LANGUAGE"

Digiinomics

"BITCOIN MAKES MONEY PROGRAMMABLE. MONEY IS SIMPLY DATA"

"BITCOIN'S VALUE = TIME ITSELF"

"Time is specified in units of block transaction confirmation times"

"net, net of money are formed using wave form motion time epoch cycles to process, parse, syntax as instructions"

BITCOIN BLOCKCHAIN BLOCKS, AGENTS, MOTES, BOTS, PACKETS, FRAMES, HEARTBEAT, PINGS, HOPS, BEACONS ARE *METAPHORS /MEMES*

ALICE CORP VS CLS BANK "claims may not be directed towards an abstract idea"

US SC 573 US 134 2347

USPTO 13/573,002 BASEBALL MEME PHYSICAL = OPPOSITE OF ABSTRACT

"A blockchain is a consensus-based system. It only works if all nodes reach an identical state"

"A smart contract is a piece of code stored on a blockchain, triggered by blockchain transaction reads / writes data in the blockchain's Dbase"

GENESIS EPOCH — SYNTAX

BLOCKCHAIN Programmable Money CLOCK CYCLES / EPOCHS

← cycle n → ← n + 1 → ← n + 2 → Δ δ

NAMED DATA NETWORKING

"Blockchain consortiums are working less on distributed ledgers and more on Contract Description Languages CDL, DAML Digital Asset Modeling Language" Coindesk Article

NATO

STOCK MIC CODES

STRUCTURED DATA EXCHANGE TEMPLATE FORMS

300+ USE CASES

LOGIC / FILTERS

SYNTAX / SYMBOL LEXICON LIBRARY

ISO

SYNTAX LEXICON Library

1st Compiler

</ORG_ID>

</URN>

Real World Assets

R W A

A.I.

Alpha Numeric Brevity Codes

Coder Guide Rosetta Stone

CLOCK FACE 360'

90 / 90 / 90 / 90

BASEBALL "DIAMOND"

A diamond Is a square Is a block in 3D

Satoshi Nakamoto: "The solution we propose begins with a TIME STAMP SERVER

2nd Base

ALICE Corp VS CLS BANK

SC 573 US 134 2347

CLAIMS MAY NOT DIRECT TOWARDS ABSTRACT IDEAS

Physical = Opposite of abstract = ALICE

HEART BEACON CYCLE

TIME – SPACE METER

USPTO 13/573,002

MACRO CYCLES

RULES / ROLES

INSTRUCTIONS

WORKFLOW

UMPIRE

COACH

90 feet

90 feet

Blockchain / crypto currency increments

Blockchain BLOCK in 3D = CUBE

Cube has Length, Depth, Height, Volume

3rd Base

STATISTICIAN

Metrics, Meters

Stat Mean Value Index

UNIVERSAL HEARTBEAT MESSAGE EVENT BUS

first base

RUNNER

Message Bus

Firefly – Heartbeat Algo

Stochastic Harmonization

FIX {"108"}

FLASH MESSAGE EVENT BUS

3 X 5

HASH TABLES

STATE META

DATA SHARDS

90 feet

SETTLEMENTS / EXCHANGES = TAXABLE EVENTS AKIN TO PROPERTY

90 feet

IRS

#1421

EVENTS

State Meta

Data Snapshots

Survey Point

MICRO CYCLES

home plate

TIME STAMP SERVER

Δ δ

Epoch Time Cycles

Circle USDC

Investopedia

Stablecoins are cryptocurrencies whose value is pegged, or tied, to that of another currency, commodity, or financial instrument. Stablecoins aims to provide an alternative to the high volatility of the most popular cryptocurrencies, Source JDSUPRA

CIRCLE

Circle Financial Ltd lawsuit brought by Veritasium Capital for alleged infringement of its digital-asset trading patent. U.S. District Court for the Eastern District of Texas, No. 2:22-cv-00498

Veritaseum™

TESLA "ALL IS WAVE FORM MOVEMENT"

NOSTRADAMUS of FRANCE

CENTURY 8: QUATRAIN 28:

"The copies of gold and silver inflated,
after the theft were thrown into the lake,
At the discovery that all is exhausted and dissipated by the debt,
All scripts and bonds will be wiped out."

"FutureMan"
13/573,002

"THE FINANCIAL NOSTRADAMUS"
REGGIE MIDDLETON

Reggie Middleton

"Father of DeFi"

US11196566
US11895246
JP6813477

World Game (s)

Fulcrum

Schelling point: a.k.a. focal point, is a solution people tend to choose by default in the absence of communication to avoid coordination failure introduced by the economist Thomas Schelling in his book "The Strategy of Conflict" published in 1960.

Schelling points are particularly useful in multiplayer games where players respond based on what they think the other person's response will be.

World Game (s) Fulcrum

Schelling point: focal point = solution choosen by default in the absence of communication to avoid coordination failure introduced by the economist Thomas Schelling in his book "The Strategy of Conflict" published in1960.

Schelling points are particularly useful in multiplayer games where players respond based on what they think the other person's response will be.

Schelling Point Conference: focuses on the intersection of cryptocurrency and social good, bringing together innovators, thought leaders, and advocates to explore how blockchain tech can create positive change.

Schelling points are not always definite solutions and their conspicuousness can depend on time, place, and individuals

THE HEART BEACON CYCLE
TIME – SPACE METER / METRICS
BRIDGE / MEDIATION / MODERATION
GATEWAYS TO A NEW WORLD
USPTO 13/573,002
THE ARLINGTON INSTITUTE
REV K
Linda
The
Psychic
BATTLEFIELD
DIGITIZATION
Net Enabled Operations
NEO
MR
MaGOO
X 3
THE
ARLINGTON
INSTITUTE
TIME
Will There Be a Recession?
Economist
Milton Friedman
ALGORITHMIC REGULATION
K% RULE GDP INDEX
World (Peace) Game
1961 simulation by
Buckminster to help
create solutions to
overpopulation, the
uneven distribution
of global resources.
THE WORLD
GAME
ANNEX K
SIGNALS &
TELEMETRY
the world famous
inventor of the
geodesic dome
r. buckminster fuller
operating manual
for
spaceship earth
INFOCON
5 4 3 2 1
INFORMATION
CONDITION
TRC
NEWS
G.W.
DeFI
Eco Econ
Incentive
TIME- SPACE
METRICS
METERS
TRANSITIONNET
A GLOBAL INITIATIVE TO DESIGN A NEW WORLD
Federation
Gateway
THE ARLINGTON INSTITUTE
JOIN THE TEAM OF INNOVATORS
AND THOUGHT LEADERS
HEARTBEAT % REAL GDP
("108")
ALGORITHMIC REGULATION

The current standard time common throughout the world is based on a 24-hour clock, with zones that are are either 12 hours ahead or behind **Coordinated Universal Time (UTC)**. However, these time zones are decided upon by individual governments, without overall coordination and can even extend fourteen hours ahead UTC.

STOCHASTIC HARMONIZATION / PROCESS BY PRECEDENCE

-11 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5 +6 +7 +8 +9 +10 +11 +12 -12

SPACESHIP EARTH

DISTRIBUTED STATE

{"URN"}

{"Org_ID"}

+14 NDN

Int'l Date Line

<Interest>

vector <Distance>

Spatial Econometrics

TARIFF CHANGE

HEARTBEAT SYNC DELTAS

% REAL GDP

{"108"}

ALGORITHMIC REGULATION

TIME – SPACE SYNC PULSE

FRIEDMAN's K% RULE % GDP

FIX

Firefly Heart Beat Algo

EVENT BUS

TOKENIZED CURRENCIES

NET

currencyindex

CURRENCY CONVERTER

Int'l Date Line

Firefly inspired Heartbeat Synchronization nodes strive to sync in a distributed system. Nodes generate periodic "heartbeat" events approximately at the same time. There is no requirement to sync during a cycle length In real time as long as the time cycle length is bounded & all nodes agree on it eventually

Firefly Event Flash Messages

Geo-Spatial Temporal Beacon

On / Off Shore

The proposed **Universal Timezone System** would do away with all these different time zones. Instead, it would be the same time all over the world, all the time.

queueing systems wait times stochastic processes, function scheduling Start, Stop TTL

PROXIMITY BEACONS

BLOCKCHAIN PARSING

ERLANG

Nicotib

Erlang / Equilibrium Time – Sync Algorithms

ROLES RULES

Heartbeat Date Time Stamps Sync Pulse

STATE META DATA SNAPSHOTS

BITCOIN BLOCKCHAIN TRANSACTIONS ARE BASED ON TIME SEQUENCING TRANSACTION STATE CHANGES TO DISTRIBUTED LEDGERS

BEACON BROADCAST

MICRO- CYCLES

QUANTUM RANDOM #

O'REILLY TIME EQUATIONS

Time Series Databases

05:08:57

ATOMIC CLOCK

NIST Beacon

A Public Randomness Service

NON_ REPUDIATION

Process transactions by precedence

Attribute Series

TIME Function

Geo Spatial Temporal Series

Time Series

Value

Time

Arrival Rate

Queue Forms

Limited Resource

Service Rate

RFID

Delay

ERLANG CALENDAR: Calculate Wait Times

Time Stamp to Date Time Conversion

The current standard time common throughout the world is based on a 24-hour clock, with zones that are are either 12 hours ahead or behind **Coordinated Universal Time (UTC)**. However, these time zones are decided upon by individual governments, without overall coordination and can even extend fourteen hours ahead UTC. UTZ TIME ZONE SYNC STOCHASTIC HARMONIZATION

The proposed **Universal Timezone System** would do away with all these different time zones. Instead, it would be the same time all over the world, all the time.

SCOTUS ALICE CORP VS CLS BANK 2014 RULING: ABSTRACT VS TANGIBLE

USPTO 13/573,002 PRIOR ART

Physical = Opposite of Abstract

Q: WHO IS "SATOSHI NAKAMOTO" ?

A timestamp server works by taking a hash of a block of items to be timestamped and widely publishing the hash, such as in a **newspaper or Usenet** post [2–5]. The timestamp proves that the data must have existed at the **time**..

XRP = 10,000 Each ?

RIPPLE LABS / XRP

Baseball fields have standard measurements for various components, including the infield and outfield. The infield consists of a diamond with 90 feet between the bases and a pitching distance of 60 feet 6 inches for adult and senior leagues. Home plate is located 90ft away from first base to The right and third base on the left. Bases are positioned at 90-degree angles from home plate.

Honus Wagner **NFT Non-Fungible Cryptocurrency Token**
Honus Wagner is a legendary baseball player
T206 Honus Wagner card sold **$6.6 million** August 2021
This highlights the cultural and financial significance of Honus Wagner memorabilia, which could potentially be replicated in the digital space with NFTs (AI web search)

Defunct crypto exchange Mt. Gox has said that a repayment date will be set in "due course"
February 7th **2014** trading halted

MT.GOX

MIT Technology Review listed Ripple Labs as one of **2014s** "50 Smartest Companies"

The World Game's (s) Great Redesign

TELEMETRY CONTROL GRID SYNC MATRIX

ADAPTIVE PROCEDURAL TEMPLATE

1919 BLACKSOX WORLD SERIES GAME FIXING RULING

Firefly Heartbeat Sync nodes strive to sync in a distributed system. Nodes emit periodic "heartbeat" events at approximately the same time. There is no need to sync during a cycle as long as the cycle length is bounded & nodes eventually agree. HBC's method stipulates clock cycle values e.g., 5, 10, 15.

USPTO 13/573,002 / SCOTUS 573 U.S. 134 SCt 2347 "Alice in Wonderland Ruling"

Banks, Tech firms' form teams to assert foundation tech as a legal basis for IP intellectual property claims for programmable $$$ DeFI / TRADEFI

Use Case: Tokenize Europe 2025 initiative: reuse DoD / NATO's structured data brevity OPSCODES mapped to 2525A, B, C, D symbols needed for A.I. man-machine interface Reuse, modify 300 + Use Case message set templates data element FFIRNs FFUDNS Of system of systems engineering architecture structure data exchange (DoD) (NATO)

TIME EPOCHS & SYNTAX = FOUNDATION TECH

USPTO 13/573,002 The Heart Beacon Cycle Time – Space Meter / Adaptive Template

FIREFLY - Heartbeat Algo

Bologna Italy / Hungary / China Universities

ECO ECONOMIC HEARTBEAT

("108")

K%

ECONOMIC MACRO CYCLES

TIME-SPACE SYNC

FEDCOIN WORLDCOIN

LENGTH OF REAL TIME CYCLE IS ARBITRARY AS LONG AS NODES EVENTUALLY AGREE

K% GDP RWA RULE

Luxor Temple Egypt:
"The shortest path towards knowledge of truth is nature"

Temple of Man

LUXOR EGYPT

TARIFF TOOL
ZONE CALC
METRICS, METERS

NEURAL NET EMULATION

BLOCKCHAIN PARSING Erlang TIME EQUATIONS

{"Org_ID"}

{"URN"}

TERRA
TRC

COMMODITY PRICE INDEX

LEADING ECONOMIC INDICATORS

LEAD ECONOMIC INDICATORS

currencyindex

STAT MEAN VALUE INDEX

SCHELLING POINT TRUTH

Price Indexes in Time and Space

Methods and Practice

FRIEDMAN's K% RULE

ALGORITHMIC REGULATION

TOKEN ECONOMICS

ETF

COMMODITIES

FIREFLY inspired Heartbeat Sync Algo

PRECEDENCE PROCESSING | UTZ SYNC PULSE | SYNC DELTAS

NIST Beacon
A Public Randomness Service

NON REPUDIATION

Crypto Currency TIME STAMP SERVER / SERVICE

The current standard time common throughout the world is based on a 24-hour clock, with zones that are are either 12 hours ahead or behind **Coordinated Universal Time (UTC)**. However, these time zones are decided upon by individual governments, without overall coordination and can even extend fourteen hours ahead UTC.

UTZ TIME ZONE SYNC

SYNC TO CLOSEST HEARTBEAT

{"URN"} {"URN"}{"URN"}

HEARTBEAT EVENT FLASH MESSAGE BUS

UTZ STOCHASTIC HARMONIZATION

FIX ("108")
{"Org_ID"}
RFID

Universal Metrics / Meters

Geo-spatial
Temporal
Syntax-Semantic
Sync & Consensus

$$$

TARIFF TOOL
ZONE CALCULATION

ON / OFF SHORE

SYNC DELTA STATE META DATA SNAPSHOTS

The proposed **Universal Timezone System** would do away with all these different time zones. Instead, it would be the same time all over the world, all the time.

{"URN"} {"URN"}

{"DAO_ORG_ID"}

$$$ MICRO Transactions

TARIFF TOOL
ZONE CALC
METRICS

DEMURRAGE
PARKING
Logistic Fee
Incentives

EVENT STATE SNAP	SYNTAX NONCE HASH	EVENT STATE SNAP	SYNTAX NONCE HASH	EVENT STATE SNAP

Net, Net of $$$ formed by Time Epoch Cycles / Syntax

cycle n → | n + 1 → | n + 2 →

"Heartbeat Synchronization nodes in a distributed system generate periodic local heartbeat events approximately at the same time. It differs from classical clock sync in that nodes are not interested in counting cycles and agreeing on the ID of the current clock cycle. No rule governs the length of a cycle with respect to real time as long as the length is bounded & all nodes agree on it eventually"

THE TERRA (TRC)

Trade Reference Currency

SHELLING POINT

Friedman's K % Rule

SLA: Closer = Cheaper
Closer = Less Fuel
= Less Time, CO2

{"TOKENs TAGS"}
{"URN"} {"URN"}
</URN> </URN>
{"URN"} {"URN"}

TRADE ZONES

DEMURRAGE FEES

MICRO PAYMENTS

TARIFFS TARIFFS

currencyindex

Terra Trade Reference Currency TRC "world currency"
Bernard A. Lietaer Belgian economist proposed 1991
Basket of 9-12 most important commodities. Public issued demurrage fees for storage, shipping, handling

The current standard time common throughout the world is based on a 24-hour clock, with zones that are are either 12 hours ahead or behind **Coordinated Universal Time (UTC)**. However, these time zones are decided upon by individual governments, without overall coordination and can even extend fourteen hours ahead UTC.

UNIVERSAL TIME ZONE UTZ

Example: 100 Terra = 1 barrel oil
+ 10 bushels of wheat
+ 20 kg of copper + 1/10 Oz gold

STOCHASTIC HARMONIZATION

UNIVERSAL MESSAGE EVENT BUS

("Commodity_Tokens"
{"TARIFF TRADE ZONES"}

{"Org_ID"} {"URN"}

FIREFLY – HEARTBEAT ALGO
MATCH FIREFLY EVENT SYNC
TO CLOSEST CLOCK CYCLE

vector vector
Closer is Cheaper Closer is Faster

Proximity Beacons

Int'l Date Line

Logistics Demurrage fees

Process Events By Precedence

Time Series

Value Time

EVENT BUS
HEARTBEAT
FLASH MESSAGES
</URN> {"ORG_ID"}

Geo
Spatial
Temporal Series

EDISON / FORD
MONITARY
OPTION 1921

French newspaper "Le Fédériste"
"L'Europa monnaie de la paix"
Money of peace" Born Jan 1st 1933 $$$

Firefly inspired Heartbeat Synchronization nodes strive to sync in a distributed system. Nodes generate periodic "heartbeat" events approximately at the same time. It differs from classical clock sync in that nodes are not interested in counting cycles to agree on the ID of the current clock cycle. There is no requirement to sync during a cycle length In real time as long as the length is bounded and all nodes agree on it eventually"

EVENT BUS

The proposed **Universal Timezone System** would do away with all these different time zones. Instead, it would be the same time all over the world, all the time.

K% RULE ECONOMIC HEARTBEAT

K% VARIABLE YEARLY GDP SNAPSHOT

BASKET OF GDP / CRYPTO / CURRENCY INDEX

'K-Percent Rule Macro economic money-supply heartbeat automatically adjusts $ supply by a set amount "K" variable regardless of cyclical state of the economy e.g., set growth rate variable to real yearly % GDP

The current standard time common throughout the world is based on a 24-hour clock, with zones that are are either 12 hours ahead or behind **Coordinated Universal Time (UTC)**. However, these time zones are decided upon by individual governments, without overall coordination and can even extend fourteen hours ahead UTC.

The proposed **Universal Timezone System** would do away with all these different time zones. Instead, it would be the same time all over the world, all the time.

"Heartbeat Synchronization strives to have nodes in a distributed system generate periodic local "heartbeat" events approximately at the same time. It differs from classical clock sync in that Nodes are not interested in counting cycles and agreeing on the ID of the current clock cycle. There is no requirement regarding the length of a cycle with respect to real time as long as the length is bounded and all nodes agree on it eventually"

601

METRICS TEMPLATE

THRESHOLD TRIGGERS INCREASE
BEACON BROADCAST AREA / RADIUS
IN ZONES e.g. STOCK MARKET TRANCHES
GEO-SPATIAL, TEMPORALINTENSITY

NUMBERS ARE ARBITRARY BUT MUST MATCH
E.G., 5 OR 4 OR 3 BUT NOT 5 AND 4, 5 AND 3

REPLACEMENT SHEET

607

ALERT LEVEL >
> NEWSCAST ZONE

500
400
300
200
100

5
4
3
2
1

RISK CORRELATION

INFOCON
5 4 3 2 1
INFORMATION CONDITION

TRIGGERS

602

+3
+ 2
+ 1
0
+ 1
+ 2
+3

TARIFF CHANGE

M2M MACHINE TO MACHINE PARSING RELIES
ON CONSISTENT NUMBERING SCHEME

GEO-SPATIAL TEMPORAL INTENSITY
METRICS / VECTORS

6

CAP
XML

AAA – BBB - D

NIEM

EQUITABLE METERING

605

+6 TO +8 | +3 TO +5 | -1 TO +2 | - 4 TO -2 | -8 TO -5

EVENT SEVERITY INDEX

TRACK BY ORG ID / URN

vector

603

ALERT LEVEL CHANGES

CAP
XML

RESPONDERS

vector vector vector

GEO-SPATIAL RADII DEFINED
BY WATER DROP AREA ZONES

CHILD SCHEMAS, DATA ISLANDS

5 LEVEL ALERT SYSTEM
COLOR CODE CONDITION LEVEL

604

			HOMELAND SECURITY ADVISORY SYSTEM	COMBINED COMMUNICATION ELECTRONICS BOARD CCEB	INFOCON LEVELS OF CONCERN
RED	SEVERE	CLOSE FACILITIES STOP PROCESSES	SEVERE/DELTA FINE	FLASH OVERRIDE FINE	INFOCON 4
ORANGE	HIGH	TAKE PRECAUTIONS COORDINATE W/OTHER GROUPS	HIGH/CHARLIE DOES	FLASH (Z) DOES	INFOCON 3
YELLOW	ELEVATED	INCREASE SURVEILLANCE	ELEVATED/BRAVO BOY	IMMEDIATE (O) BOY	INFOCON 2
BLUE	GUARDED	- CHECK - REVIEW	GUARDED/ALPHA GOOD	PRIORITY (P) GOOD	INFOCON 1
GREEN	LOW	PLANNING	LOW/NORMAL EVERY	ROUTINE (R) EVERY	INFOCON 0

USPTO 13,573,002 THE HEART BEACON CYCLE TIME – SPACE METER / METRICS & INTERNET SURVEY METHODS

ENERGY MICROGRIDS

BLOCKCHAIN MICROGRIDS

TESLA

Bitcoin Memes

MEDIATION CONVERSION GATEWAY

TERRA TRC

MACRO CYCLES

MONEYBALL ECONOMICS

COMMODITIES

ECONOMIC HEARTBEAT

GDP

> $$$

currencyindex

FRIEDMAN'S K % RULE

FIX PROTOCOL

INDUSTRY-DRIVEN MESSAGING STANDARD™

HB MSG </108>

</FILTERS>{"FILTERS"}

</CLASS_TYPE>

{"Org_ID"}{"URN"}

<URN>
<URN>
<URN>
<URN>
<URN>
<URN>

POOL

Δ δ

LAST LOSS

AAA/ Aaa
AA/Aa
A/A
BBB/ Baa
B/B

FIRST LOSS

500 400 300 200 100

5 4 3 2 1

RISK CORRELATION

HEARTBEAT STATE META DATA SNAPSHOTS

Cloudcenter

Cloudcenter

IEEE 802.15.4 OASIS MQTT

TELEMETRY TRANSPORT

IEEE 802.1AG HOP BY HOP DETECTION

IEEE C37.118 Harmonization & Sync heartbeat update Interval

IEEE 802.11

HOP BY HOP CONTROL

Paul Revere Linear, Sequential

Time Series Database

X

Σ

Δ δ

Price Indexes in Time and Space

B B B B

{"TAGGED BITCOINS"}

Veritaseum

Spatial Econometrics

PROCESS BY </PRECEDENCE>

SonarMaps ID_Hops

Bitcoin = Property

IRS #1421 Memo

I.R.S.

% Block Mined

% Block owned

Mined Bitcoins

Unmined Bitcoins

Δ δ Land Use Meme

BLOCK

BLOCKTIME ARBITRAGE

Blockchain Timestamps

NDN

NDN

ON / OFF SHORE PROXIMITY BEACONS

ON OFF SHORE

GEO LOC LAT / LONG

PING

Triangulation

Euclidian Geo

GPS GEO LOC

DATE TIME STAMP

NDN </INTEREST>

NDN {"DISTANCE"}

Multi-Meme Metrics

EVENT BUS

Match to Closest Heartbeat Cycle

FIREFLY-HEARTBEAT ALGORITHM

Δ δ

BLOCKCHAIN PARSING

Clock

Clock adjusted

5:45 PM

ERLANG

Firefly Events Strive to Sync To Closest Heartbeat

HOPS / RADIUS = REACHABILITY

WATER DROP IN POND MEME

+ 3
+ 2
+ 1
+ 1
+ 2
+ 3

AREA RADIUS

</FILTERS>

BY ORG ID / URN

NDN </INTEREST>

</DISTANCE>

Closer = Cheaper

Closer = < Fuel

Demurrage Charges

vector

Δ δ

Heartbeat Snapshots

MICRO CYCLES

IDMaps: Global Internet Host Distance Estimation Service

NDN: CONTENT ROUTING / <StratML> NDN INTEREST = Time / Distance

IDMaps scalable Internet-wide architecture measures, disseminates distance information

HOP COUNTS

REACHABILITY

Higher-level services collect distance information to build a virtual distance map of Internet & estimates distance between any IP address pair

/localhost/nfd/fib/add-nexthop

IDMaps provides distance information used by SONAR/HOPS query/reply service

Name Prefix
<Org_ID> Trie (NPT)

NDN_NAMES

NDN NAMED DATA NETWORK RIB / FIB Datasets event notification

NDN INTEREST LENGTH = DISTANCE BY HOPS

NDN INTEREST

IS DATA FRESH ?

Distance information adjusts to "permanent" topology changes e.g., splits, joins, adds, moves, drops, merges in lieu of formal merger / acquisition

NDN RIB

TRIANGULATION

NDN STRATEGY CHOICE MANAGER – RIB Routing Information Base add-nexthop

Datasets and Event Notification

INTEREST in <URNs>

IDMaps assists Network Time Protocol (NTP) servers establish long term peering relationships

Distance Metrics: latency (e.g., round-trip delay) and, where possible, bandwidth.

MICRO-CYCLES

NDN INTEREST LIFETIME = TTL Time To Live

HEARTBEAT STATE META DATASNAPSHOTS

GEO-SPATIAL TEMPORAL INTENSITY METRICS, METERS, VECTORS, TARIFF

INFOCON / DEFCON ALERT EVENTS INFORM STAKEHOLDERS OF STATUS CHANGE i.e., NORMAL TO ELEVATED, HIGH OR SEVERE. ALERT LEVELS ARE ARBITRARY BUT MUST BE CONSISTENT e.g., 3 OR 5 FOR MACHINE TO MACHINE PROCESSING

Geo-Spatial Temporal Intensity NOVEL METRICS / METERS:

Paul Revere = linear, sequential

TCP/IP hop by hop counts, by hop controls

Water Drop = AREA / INTENSITY
Cyclic Frequency

TARIFF CHANGE

NAMED DATA NETWORKING

</INTEREST>

XML
MTF
300 + MSG

INFOCON 5 4 3 2 1 INFORMATION CONDITION

<CONTENT> TEMPLATES

OASIS

IEEE 802.15.4
OASIS MQTT
TELEMETRY TRANSPORT

ARRESTED-D

NIST TIME BEACON

Hop Count

START

SOURCE NETWORK 172.16.0.0/16

omnisecu.com.R1 omnisecu.com.R2 omnisecu.com.R3 omnisecu.com.R4

DESTINATION NETWORK 172.27.0.0/16

INSTRUCTIONS TO MASTER CONTROLLER

Number of Hops = 3

TTL = Time To Live

STOP

PROCESS <CONTENT>
<TAGS> BY PRECEDENCE

5 4 3 2 1

DEFCON / INFOCON

CLOSER = FASTER, CHEAPER > CYCLE = > INTEREST NAMED-DATA NETWORKING

IDMAPS
SONARHOPS
INTERNET
TRIANGULATION

4 / 3 / 2 / 1 / NULL / 1 / 2 / 3 / 4

.0001 .05 .01 .1 0 5 15 30 99

vector

WirelessHART

ALERT LEVEL >
> NEWSCAST ZONE

time synchronized, self-organizing, mesh Net

(b) AREA (A) (B) (C)

NDN Data Packet

NDN Interest Packet

> INTENSITY
➢ FREQUENCY
➢ INTEREST NDN

Survey Method
ID target
population
triangulation

Normalized Intensity

Time (s)

Normalized width

GEO-SPATIAL RADIUS ZONE

SINE-WAVE

TRIGGERS

CAP XML

+ 3 + 2 + 1 + 2 + 3

NDN
<INTEREST> BY INTENSITY / FREQUENCY

13/573,002 HEART BEACON CYCLE

Time -Space meter, metrics / Universal data event, alert bus
Internet of Everything "ability to hear the world's heartbeat"

INFOCON 5 4 3 2 1 INFORMATION CONDITION

The four dimensions of Big Data

vector VECTOR: quantity having direction and magnitude position of a point in space relative to another point

TIME STAMP BY Org_ID, URN Before FUSION CENTER

Volume | Velocity | Variety | Veracity*

TIME STAMP 1 | TIME STAMP 2 | TIME STAMP 3 | MACRO CYCLES

SIOP "THE GRAIL"

TIME Metrics SPACE Meters COMMON PICTURE

SLA

RFid

SYNC SEED _CLOUD

Data at Rest {"108"} Data in Motion {"108"} Data in Many Forms Data in Doubt

Cloudcenter {"108"} Cloudcenter

FLASH Message UNIVERSAL DATA EVENT BUS Syntax Lexicon

{"URN"} Uniform Resource Name

FILTER BY ROLE <TYPE> <CLASS>

URN URN URN URN

QUANTUM NIST Beacon A Public Randomness Service NON-REPUDIATION

TARIFF CHANGE

PRECEDENCE PROCESSING <Org_ID> {"URN"} {"URN"}

NIST CYBER BEACON RANDOM # BEACON

* Truthfulness, accuracy or precision, correctness

REST ARREST-D {"FILTERS"}

FIREFLY – HEARTBEAT {"108"}
Stochastic Harmonization UTZ SYNC

ALGORITHM Universal Event / Alert Bus

Heartbeat synchronization strives to have nodes in a distributed system generate periodic, local "heartbeat" events approximately at the same time with a goal of all nodes starting and ending cycles at the same time eventually = map to closest OPTEMPO HEARTBEAT

SYNC SYNC ASYNC ASYNC

Flash HB Messages

State Meta Data Heartbeat Snaps MICRO CYCLES

ERLANG

HASHGRAPH Consensus Algorithm Time Averaged Time Stamping

Functional Sequential Erlang

SPACE – TIME Equations BLOCKCHAIN PARSING {"URN"} {"Org_ID"}

WATER DROP IN POND MEME

+ 2 + 1 + 1 + 2

PAUL REVERE MEME LINEAR SEQUENTIAL

< / = / >

HEARTBEAT SYNCRONIZATION

FIREFLY SYNC CONSENSUS

Geo-spatial

Distance Est Service

IDMaps SonarHops

FOAM spatial protocol

Ethereum Blockchain

World Computer Neural Network

FOAM

ENABLE MAPPING OF GOVERNANCE / MANAGEMENT RESOURCES BY PRECEDENCE SHOWN IN GEO-SPATIO INTENSITY DASHBOARD VIEWS

< GLOBAL >
0

IC / DOD/ NGO / COALITION
INDUSTRY GOVERNANCE

GOVERNANCE TAGS BY TYPE PRECEDENCE

< JOINT >
1

0 NORMAL
1 EMERGENCY

STRATML/ IODEF RID CLASSES

IC / DOD
JOINT GOVERNANCE

StratML

PRECEDENCE

< COMMUNITY>
2

PRECEDENCE

IC: INTERNAL COMMUNITY USE
MEDICAL / ENERGY /
TRANSPORTATION
COMMUNITY SPECIFIC GUIDANCE

MULTI-MODAL PROCESSING
OF PRECEDENCE: PRIORITY
IS SITUATION DEPENDENT
ACCORDING TO INFOCON, HAZCON
I.E. EMERGENCY BROADCASTS TO
THE WORLD – EVERY ENTITY
CANNOT HAVE LEVEL 5 PRECEDENCE

<DOMAINS>
3

<SHARED ELEMENT>
4

MANAGED RESOURCES GOVERNED BY
ELEMENT E.G., AGENCY, PROGRAM
HOWEVER – EXPOSED AND MADE
AVAILABLE TO ORG ID / URN GROUPINGS

GOVERNANCE TAGS BY TYPE PRECEDENCE

NORMAL OPERATIONS
PAY FOR PRECEDENCE
AS A QUALITY OF SERVICE
SLA SERVICE LEVEL AGREEMENT
PRIVACY FOR PRIVATE DATA

<PRIVATE ELEMENT>
5

MANAGED RESOURCES GOVERNED BY
ELEMENT E.G., AGENCY, PROGRAM
FOR UTILIZATION ONLY BY THAT ELEMENT

EVENT / ACTIVITY / LOCATION CLASS
0 NULL / 1 / 2 / 3 / 4

USE ORG ID / URN TAGS TO ROUTE BASED ON TYPE
OF ORGANIZATION / COMMODITY / VIRTUAL ORG
MEASURE BROADCAST / UNICAST BY ZONE BY
THRESHOLD / INTENSITY / DURATION AS MOE / MOP

< NIEM >
NIEM
BRIDGING INFORMATION SYSTEMS

NAMED DATA NETWORKING

<CONTENT> CENTRIC NETWORKING

ICS-ISAC

<ORG_ID>
<ORG_ID>
<ORG_ID>
<URN>
<URN>

URI

URL | URN

ARIN

American Registry for Internet Numbers

<GLOBAL> <JOINT> <COMMUNITY><DOMAINS><SHARED><PRIVATE>
</INTEREST> <STRAT_ML> <IODEF_RID> </DISTANCE>

Uniform *Resource Names* (*URNs*): A Uniform Resource Identifier (URI). Both URNs (names) and URLs (locators) are URIs, and a particular URI may be a name & locator Each plays a specific role:

- URNs IDENTIFICATION (SENSORS, DEVICES)
- URCs INCLUDE META-INFORMATION
- URLs LOCATE / FIND RESOURCES

<DATA CLASS TYPES>

Situational Awareness Reference Architecture (SARA)

IDENTITY, Inventory, Activity, and Sharing

<Federated ID> <URN> <type_event> <Data Class Types>

STRUCTURED MIILITARY MESSAGING FORMS: FIELD TYPES, FILTERS, TAGS
PARSED, PROCESSED, COMPILED TELEMETRY SIGNALING STANDARDIZATION

SITUATION AWARENESS

NEWSCAST

search Google

USMTF / XML MTF FORMATTED MESSAGE CATALOG
Catalog has over 300 messages to choose from have a wide number of information exchange requirements using common, CONSENSUS Message Text Formats MTFs. MTFs specify <CONTENT> / information agreed by group consensus presenting information in a logical, well specified and unambiguous layout resulting in a highly efficient information payload to overhead ratio

MIL STD 2525A

STRUCTURED <CONTENT> TEMPLATES

FILTERS
LOGIC

DISTANCE ESTIMATE SERVICE

IDMaps
SonarHOPS

SURVEY METHOD
ID <ITEMS><INTEREST>
GEO-SPATIAL AREA
TEMPORAL INTENSITY
MEASURES / METRICS

BY <TAG_TYPES>

Ledgers
Contracts
Trade SLA
Agreements

K00.99
Heartbeat
Message

CrowdSourcing

TRIANGULATION

TELCO MESH FABRIC

vector

CROWD SOURCING / FUNDING

</Organizational_Identifier_Org_ID>
Organizational Units OU, OU, OU

<Org_ID>
<Org_ID>
<Org_ID>
<Party>
<Party>
<Party>
<URN>
<URN>
<URN>
<URN>

PARTIDO X:
Distributed
Democratic
Participation

ETHEREUM:
Decentralized
Autonomous
Organizations

DAO

Don't Panic

<ID/URN>

FEDERATE

KEYSTONE

FEDERATION

-ROLES:
- <OPS>
-<INTEL>

Identity
Provider
- Mapping
- Protocol

openstack™

VOTE ON BLOCKCHAIN

PARTIDO DEL FUTURO

FEDERATED ID

Foundation Technology Trinity:

1, EPOCH (s) = Time intervals, cycles

2. SPACE (land use meme) ex: IRS memo #1421 "Bitcoin transaction akin to land"

3. SYNTAX structured data mapped to symbols for A.I. / man - machine interface

THESIS: All net artifacts, net of $ are formed with:

1) Epoch time cycle intervals ex: chip oscillations

2) Syntax parsed, processed in epoch time intervals

Artificial intelligence (AI) syntax refers to the set of rules, principles governing the arrangement of words and phrases in a programming language. In the context of AI and natural language processing, syntax ensures that language is structured in a systematic way, for effective communication and comprehension.

Understanding syntax is essential for developers to write readable, maintainable, and scalable code

ADAPTIVE PROCEDURAL TEMPLATE: LIST OF TOOLS, PROCESSES, PROCEDURES I.E., STORED PROCEDURE CALLS COMPRISED OF STRUCTURED DATA EXCHANGES USING 300 + MESSAGES / MESSAGE SETS COMPRISED OF OPSCODE BREVITY COMPUTER CODES MAPPED TO SYMBOLS FACILITATING STAMDARD MAN – MACHINE INTERFACE

USE CASE: standards adherence support for IEEE, ITU, ISO international data, internet, internet of money, IoT, Artificial Intelligence A.I ... standards

Systemic, signaling, synchronization of state meta data encoded as brevity OPSCODE tokens stochastically harmonized over the UTZ

Information Elements Roles

- COI Determination Org Interaction
- Search and Discovery
- Ontologies STANDARDS
- Taxonomies REFERENCE
- Metadata Attributes / Filters

('Org_ID'){"URN"}</URN></URN> FILTERS

FFUDN: Field Format Unit Designator #

FFIRN Field Format Index Reference #

Structured military messaging ID's messages, message sets, data element, symbol fields </108>

BY Form Field Position & NUMBER

{"108"} NDN

Firefly-Heartbeat Flash Messages

PROCESS MESSAGE BY PRECEDENCE

UNIVERSAL EVENT / ALERT MESSAGE BUS

Encyclopedia Britannica: "Language is a SYSTEM of SIGNS having meaning by convention. In this sense, language need not be confined to the spoken word".

"SIGNS AND SYMBOLS RULE THE WORLD, NOT WORDS OR LAWS"

CONFUCIOUS

MESSAGE CATALOG 300 + Use Cases

Data Elements: entity, attribute, relationship equivalents

HEARTBEAT MESSAGE = K00.99 </108> {"108"}

Object Categories	Examples	Information Categories and Examples: Location	Movement	Identify	Status	Activity	Intent
OOB	SYNTAX LEXICON	STRUCTURED DATA EXCHANGE Message Sets					
		lat/long	spd/hdg	country / alliance, type/class	readiness	targeting, reconitering	COA {"Java JS"}
		Machine Trust Language MTL			CDL Contract Description Language		YAML
Infrastructure	Comm, power, transportation, water/sewer	network, grid	throughput, flow rates,	name, part-of relationships	BDA, op levels	repair, breakdowns	expansion plans
Sociological	Culture, religion, economic, ethnic, government, history, languages	temples, historic structures					
Geophysical	Terrain, weather, climatology, oceanography, astrometry	feature lat/long, alt/dpth					

E-R Model	Class Diagram	Relational Database	Object DBMS	XML DTD / Schema	TADILs	MTF
Entity	Class	Table	Class	Element	Message	Message
Attribute	Attribute	Field / Column	Attribute	Child Element or Element Attribute	DFI	FFIRN / FFN / FUDN
Domain Value	PURCHASE CODES	Instance, Value	TOKENS		DUI	FUD

OPERATIONAL NODES / ACTIVITIES

DATA	SYSTEM FUNCTIONS	PERFORMANCE
11.4 - Classification	11.8 - Kinematics	
11.4.1 - Category	11.8.1 - Pos / Vel / Acc (P/V/A)	
11.4.1.1 - Confidence Level	11.8.1.1 - Acceleration	
11.4.1.2 - Estimate Type	11.8.1.1.1 - Angular	
11.4.1.2.1 - Alternative	1.1.2 - Linear	
11.4.1.2.2 - Evaluated D	1.2 - Estimate Type	
11.4.1.3 - Value	1.2.1 - Estimated	
	1.2.2 - Observed	
	1.2.3 - Predicted	

PURCHASE CODES

SYMBOL	Friend	Neutral	Hostile
2525C	Partner		Competitor

DATA	SYSTEM FUNCTIONS	PERFORMANCE
11.4.1.3.5 - Surface		- Velocity
11.4.2 - Platform / Point / Fea	ture Type	1.4.1 - Horizontal
11.4.3 - Specific Type		1.4.2 - Vertical
11.4.4 - Type Modifier		VA Confidence
11.4.5 - Unit		- Bearing Angle
		- Bearing Angle Rate
		- Covariance Matrix

Syntax code language parsed, processed during silicon chip generated epoch time cycles forms all things internet, net of money. state meta data sync delta heartbeat snapshots during epoch temporal micro-cycles

Situational Awareness Reference Architecture (SARA)

: Identity, Inventory, Activity, and Sharing

http://ics-isac.org/sara/

ICS-ISAC

IDENTITY: <UUID> = Devices, sensors

<ORG_ID> Organizations

Federation Gateway

<ELEMENTS>

STRATML/ IODEF RID CLASSES:
<GLOBAL><JOINT><SHARED>
<DOMAIN><FEDERATION>
<CITY><STATE><PRIVATE>

STRATEGIC MARKUP LANGUAGE

StratML

IODEF

Industrial Control System Information Sharing and Analysis Center

INVENTORY: Uniform Resource Name <URN>

<URN><URN>
<URN><URN>
<URN><URN>

<COMMODITY><WATER><ENERGY><AVAILABLE UNITS>

vector

GEO-SPATIAL TEMPORAL INTENSITY METRICS
UNIFIED EVENT / ALERT TRIGGER / THRESHOLDS

GEO-SPATIAL TEMPORAL INTENSITY METRICS / METERS

IDMaps

SonarHops

vector

tripwire

ACTIVITY: <EVENT><ALERT>

<TIME_STAMP><ORG_ID><URN>

<GEO_LOC_GPS ><STATUS>
<Halt><Moving><Stale><Ready>

CONTENT LEXICON ROSETTA STONE

NDN

TAXII

<INTEREST>

STIX

AVALANCHE

SHARING:

COMMON <TAGS>
<Organizational_ID>
Resource Names <URN>
<Time_Stamps>
<State-Meta_Data
<DATA_CLASS_TYPE>
<Heartbeat_snapshots>

NDN
<INTEREST>

CyboX

WELCOME TO THE FS-ISAC SECURITY AUTOMATION GROUP. OUR VISION IS A FEDERATED NETWORK OF STIX-BASED REPOSITORIES SHARING INTELLIGENCE IN REAL-TIME. AVALANCHE: STRENGTH IN NUMBERS, SECURELY SHARE INTELLIGENCE

NIST CYBER SECURITY FRAMEWORK

CYBER SECURITY CONTENT LEXICON ROSETTA STONE

MIL-STD 2525A

STRUCTURED <CONTENT> TEMPLATES

<TAG> LIBRARY

CYBER BEACON

NIST TIME BEACON

NIST RANDOMNESS BEACON

SYNC SEED _CLOUD

Cloudcenter

INBOUND SHARING / MICRO-CYCLES

<TAG>LIBRARY TEMPLATES

NIEM

NAMED DATA NETWORKING

<Content> Centric

USMTF / XML MTF FORMATTED MESSAGE CATALOG
Catalog has over 300 messages to choose from have a wide number of information exchange requirements using common, CONSENSUS Message Text Formats MTF
MTFs specify <CONTENT> / information agreed by group consensus presenting information in a logical well specified and unambiguous layout i.e., templates

Interface Name	HEARTBEAT Administration Interface [SCOP]
Documentation URL	http://scop.sourceforge.net/ http://linuxvirtualserver.org/software/index.html

API Information

#IeT

#Big_Data

Functionality Areas

Cloud Interface Management

configuration, start, stop cloud services, edit configuration (heartbeat messages)

API Operation Count

Programmable Money

World Computer / Blockchain

Web service access type

Network Effects / A.I.

Web application, front end to [network, device, system, blockchain] heartbeat]

LANGUAGE / PLATFORM BINDINGS

PHP Java Erlang…

Interface Characteristics

SCOP is a web application, PHP based front-end to heartbeat,
IP Virtual Server ipvs and ldirectord [e.g., check interval @ 5 seconds]
SCOP can start/stop services, view/ edit configuration files e.g., heartbeat message state management snapshots, backups, take a service online/offline, add/ remove virtual/real servers, services etc.

"The external environment could update resources at random…
One solution is a heartbeat: defining a default lease duration delaying updates until the next cycle"

QubitCoin Interval: Every 30 Seconds

Satoshi Bitcoin Blockchain
Time Stamp Server

Epoch Time Cycles

E0 E1 E2 E3…

What happens if we think about Bitcoin through the lens of *land*?

HEART BEACON CYCLE
USPTO 13/573,002
SURVEY METHODS

SC ALICE CORP VS CLS BANK: "claims may not direct towards abstract ideas"

UTXO: unspent transaction output'. bitcoins that have been sent somewhere but not yet themselves been spent. The set of all unspent transaction outputs (UTXOs) can be thought of as the latest STATE of every bitcoin that has ever been mined.

Memo #1421: Purchased Bitcoins are treated akin to property

Plots A, B, C represent 3 unspent transaction outputs controlling N Bitcoins

Mined Bitcoins

DISTANCE ESTIMATION

EUCLIDIAN GEOMETRY

Unmined Bitcoins

Un-mined coins -- think of them as parcels of land on "Bitcoin Island" not yet released:

IDMaps-SONARHOPS distance estimation query-reply service

IDMaps assists Network Time Protocol (NTP) servers establish long term peering relationships

- End-state Bitcoin quantity will be fixed like land

"Bitcoin as protocol of ownership, not transfer"

Coins never travel, but simply switch owners"

IDMaps / SonarHops collects distance data & builds virtual Internet distance maps & estimates distance between IP address pairs

Step 1: prove coin ownership <Org_ID> Coin Issuer

Step 2: coins sent where, when Lat-Long, time stamp

Step 3: specify ownership <Org_ID> issuing agent

Step 4: Issuing Org of Record adjudicates w buyer

IDMaps Distance Metrics:

latency (round-trip delay)

available bandwidth estimation

FOUNDATION TECH
DeFI / Fintech
Programmable $$$
Programmable Economy

1. TIME
INTERNET:
- Unicast
- Multicast
Anycast Publish-Subscribe
2. SYNTAX
</interest>
{"distance"}

Validation Based
- Proof of Work (PoW)
- Proof of Stack (PoS)
- Proof of Activity (PoA)
- Proof of Relevance (PoR)
- Proof of Elapsed Time

Voting Based
- Ripple
- Proof of Vote
- Proof of Trust

Authentication Based
- Proof of Authentica (PoAh)
- Proof of PUF-Enab Authentication (Po
- (Current Article)

CONSENSUS ALGORITHMS

STRUCTURED DATA
ISO 20022 Finance Services
EPCIS Electronic Product Code
Information Services Standard
create, share visibility events
MIL STD 2525 A,B,C,D Symbol
mapped to brevity codes =
Human to A.I. interaction
</K0099> </108> Heartbeat Message
300 + Structured messages
> 300 + Use cases Msg Sets
STRATML = Governance
NDN: Named Data
Networking { "INTEREST"}
FFIRNS FFUDNS
MTL Machine Trust Language
Blocktime Arbitrage

ERLANG Calendar: Calculate
Wait Times Time Stamp to
Date Time conversion
Blockchain DLT Parsing
Time Equations

INTERNET = 1) EPOCH TIME CYCLES = "BLOCKCHAIN"
2) USED (NOT) AS INSTRUCTIONS / CODE during EPOCHS

EQUILIBRIUM ALGORITHMS
Price Discovery Equations / Metrics

QRNB
NIST Beacon
A Public Randomness Service
NON REPUDIATION
QUANTUM COMPUTI

FIREFLY – HEARTBEAT
STOCHASTIC HARMONIZATION
TEMPORAL SYNCHRONIZATION
ALGORITHM / HEARTBEAT
MESSAGE EVENT BUS

IDMaps / SonarHops
Distance Estimation
Service
PROXIMITY BEACONS

Unicast: private or unique resource requested.
Multicast supports larger audience serving content simultaneously to multiple users

O'REILLY
Time Equations
Time Series Databases

TIME SERIES
Attribute Series
TIME
EPOCHS
TIME FUNCTION

Commodities Index Basket / FIAT PRICE Discovery Algo / MEDIATION

SOUND WAVES
QUANTUM
COMPUTING
SPEED PARITY
INTEROP

ALGORITHMIC STABLE COIN
COMMODITY INDEX BASKET

EQUILBRIUM ALGORITHMS
PRICE DISCOVERY ALGOS

SHELLING POINT

TOKENS =
OPSCODE
BREVITY
CODES
Mapped to
Symbols AI

DEMURRAGE FEES

SLA Service Level Agreement
CLOSER = CHEAPER = CLOSER

Edison's Monetary Option

Cambridge University Press 2009

"Crops hold their value best over time"

"Thomas Edison publicly introduced his latest invention: a new type of money, a crop index commodity-backed currency that he believed was the long-term solution to America's monetary woes. "I want to cast the variable out of money. This gold money is not good enough. It's a fiction" "New York Times 1922

FIREFLY – HEARTBEAT ALGORITHM CHINA: nature-inspired metaheuristic optimization algorithm developed by Xin-She Yang flashing behavior of fireflies (Yang, 2008), adapted to solve continuous optimization problems (Lukasik and Żak) 2010, 2013

USPTO 13/573,002 The Heart Beacon Cycle Time – Space Meter

Tokenization of Physical Assets Enables Economy Of Everything

{"URN"}

{"URN"}

{"URN"}

{"URN"}

COMMODITY RWA
Stable Coin index

ALGORITHMIC STABLE COIN
COMMODITY INDEX
CURRENCY PROGRAMMABLE $$$

BIOCOIN
SUPPORT YOUR LOCAL FARMER

NETWORK
CENTRIC
OPERATIONS

INFOCON
5 4 3 2 1
INFORMATION
CONDITION

Thomas Edison's Monetary Option
Cambridge University Press 2009

"Crops hold their value best over time"

COMMODITY RWA
REAL WORLD ASSET
STABLE COIN INDEX

"Thomas Edison publicly introduced his latest invention: a new type of money, a crop index commodity-backed currency that he believed was the long-term solution to America's monetary woes. "I want to cast the variable out of money. This gold money is not good enough. It's a fiction" "New York Times 1922

FIREFLY – HEARTBEAT ALGORITHM CHINA: nature-inspired metaheuristic optimization algorithm developed by Xin-She Yang flashing behavior of fireflies (Yang, 2008), adapted to solve continuous optimization problems (Lukasik and Żak) 2010, 2013

</Organizational ID>
</Personal_ID>

USPTO 13/573,002 The Heart Beacon Cycle Time – Space Meter

High Frequency Trading
With
CIRCUIT BREAKER
FIX "108" Heartbeat Message
Q.R.N.B
NIST Beacon
A Public Randomness Service
{"EVENT"}
TTL
< = >
{"THRESHOLD"}
STOP
START
Sustainable Stock Exchanges Initiative
SSE
SLA
FIX
{"108"}
ALGORITHMIC REGULATION
UTZ TIME ZONE STOCHASTIC HARMONIZATION
NON-REPUDIATION
SLO
UTZ TIME ZONE SYNC
QUANTUM WAVE EVENT DETECTION
IBM = $50.25
IBM = $50.15
IBM = $50.00
Stock Price Server in New York
Stock Trader in Chicago
Stock Trader in London
10 msec
500 msec
1000 msec
2000 msec
Peg event reports to closest Heartbeat EPOCH Interval
Figure 1: Latency induces uncertainty for traders "further" away from a centralized resource.
RaQL
Q VALUES
NASH Equilibrium Algorithms
Game Theory
Reaction function for OCR
Reaction function AQA
Nash equilibrium (also the Co equilibrium; c.f. Figure 4)
Waves
Quantum
SOUND WAVES enable Different types of quantum tech to "talk"
SOUND WAVES QUANTUM COMPUTER SPEED PARITY
STOP
</108>
Send signal to Master process ID # = new config / Worker process checks new config
MASTER CONTROLLER
WORKER/TASK HEARTBEATS
The current standard time common throughout the world is based on a 24-hour clock, with zones that are either 12 hours ahead or behind Coordinated Universal Time (UTC). However, these time zones are decided upon by individual governments, without overall coordination and can even extend fourteen hours ahead UTC.
TRANSACTION RATE, SPATIAL – TEMPORAL METRICS
SERVER ON / OFF FLOOR ADJUST
MESSAGE BUS
SYNC TO CLOSEST
HEARTBEAT
STOCHASTIC HARMONIZATION
"LENGTH OF REAL TIME CYCLE IS ARBITRARY AS LONG AS NODES EVENTUALLY AGREE"
Quantum Speed Limit
Erlang Time Equations
IDMaps
SonarHops
Distance Estimation Service
SPACE-TIME
Meters
Metrics
PRICE DISCOVERY ALGORITHMS
Hop by Hop
INTEREST
DISTANCE
NAMED DATA NETWORKING
Int'l Date Line
FIREFLY
HEARTBEAT
ALGO
STATE
META
DATA
SNAPS
{"EVENT"}
{"TAGGED_CRYPTO"}
{"ORG_ID"} {"URN"}
On Shore
Off Shore
Zero Trust Transaction
on TIME X, in Y condition at PLACE Z
Capital Market Smart Contracts
DARK POOLS
SHADOW BANKS
SCOTT PATTERSON
The proposed Universal Timezone System would do away with all these different time zones. Instead, it would be the same time all over the world, all the time.

US 7865358

Machine-based system for transforming data from a source form to a target form, a tool is provided for sharing information established in developing a transformation model. The shared information may relate to rules for mapping source collection terms to standardized terms, rules for ordering or SYNTAX, rules for classifying terms or other transformation rules.

US 7865358 CLAIM 1. method converting textual data from source form to target forms, where target form differs from source form's linguistics, syntax

Multi-user functionality for converting data from a first form to a second form

INFOCON 5 4 3 2 1 INFORMATION CONDITION

Symbolic artificial intelligence: collection of all methods in artificial intelligence research that are based on high-level symbolic (human-readable) representations of problems, log

NATO OTAN

"SIGNS AND SYSMBOLS RULE THE WORLD, NOT RULES OR LAWS
Confucius

Alpha-numeric OPSCODE
Brevity codes mapped to symbols,
Symbol sets = structured data

System and method for collecting, representing knowledge using task-method-knowledge with structure-behavior-function in a computer system.. BIZ COA 1, 2, 3

Symbolic artificial intelligence: collection of all methods in artificial intelligence

research that are based on high-level symbolic (human-readable) representations of problems, logic and search.[1] Symbolic AI used tools such as logic programming, production rules, semantic nets and frames, and it developed applications such as knowledge-based systems (in particular, expert systems), symbolic mathematics, automated theorem provers, ontologies, the semantic web, and automated planning and scheduling systems. The Symbolic AI paradigm led to seminal ideas in search, symbolic programming languages, agents, multi-agent systems, the semantic web, the strengths. imitations of formal knowledge and reasoning systems.

Physical symbol system (also called a formal system) takes physical patterns (symbols), combining them into structures (expressions) and manipulating them (using processes) to produce new expressions. The physical symbol system hypothesis (PSSH) is a position in the philosophy of artificial intelligence formulated by Allen Newell and Herbert A. Simon. They wrote: A physical symbol system has the necessary and sufficient means for general intelligent action."[2] —Allen Newell and Herbert A. Simon

This claim implies both that human thinking is a kind of symbol manipulation (because a symbol system is necessary for intelligence) and that machines can be intelligent (because a symbol system is sufficient for intelligence).[3] The idea has philosophical roots in Hobbes (who claimed reasoning was "nothing more than reckoning"), Leibniz (who attempted to create a logical calculus of all human ideas), Hume (who thought perception could be reduced to "atomic impressions") and even Kant (who analyzed all experience as controlled by formal rules).[1] The latest version is called the computational theory of mind, associated with philosophers Hilary Putnam and Jerry Fodor.[4
Source: Wikipedia: https://en.wikipedia.org/wiki/Physical_symbol_system

SOFTWARE DEFINED NETWORKING

Command Syntax

REST State Transfer

NETOPS

COMMAND SYNTAX
STATE TRANSFER
Unicast / Multicast
Flow Tables / Workflow

Dynamic Network Configuration Management

NET CENTRIC WARFARE

SYSTEM OF SYSTEMS TELEMETRY

COMMON COMPONENTS, BUILDING BLOCKS USED WITHIN FEDERATION PROMOTING COMMON GOALS, PROCESSES

- SDN is a *framework* to allow network administrators to *automatically* and dynamically manage and control a *large number* of network devices, *services*, topology, traffic paths, and packet handling (quality of

Netcentric / "network-centric" participating in a continuously evolving, complex community of people, devices, information and services interconnected by a network to optimize resource management and provide information on events and conditions.

Net-centric Enterprise Architecture : "massively distributed architecture with components, services available across and throughout an enterprise's entire lines-of-business."

SIOP

DevOps model and tools to enable scale, programmable agility, and policy-driven automation, and provides network virtualization to mask network configuration complexity with set of networking APIs

SDN FRAMEWORK

Rule | Action | Statistics

Policy Control

Broadcast

STATE

Multicast

Flow Table

VLAN ID

RESTFUL API

TIME SLOT SWITCH

CONTEXT MATCH MAPPING INSTRUCTIONS

TIME SLOT: Period of time activities governed by specific regulations.

FORWARDING INFORMATION BASE FIB

TIME OUTS TTL

PACKETS ARE TIME CYCLES USED / NOT USED TO PROCESS / NOT PROCESS INSTRUCTIONS DESCRIBED AS SYNTAX = STATE META DATA TYP BY DATA </CLASS> / DATA </CONTEXT>

ACTIONS: DROP / GROUP

DISTRIBUTED APPS AND WORKFLOW AUTOMATION

Socket Plane = TEMPLATEs = vendors use one standard, while optimizing own technologies for differentiation.

COMPONENT factory multi-platform

docker

socketplane

NCW FRAMEWORK

Unicast

Multiple Data Streams

WORKFLOW
</CONTENT>
</FILTERS>
</CONTEXT>

REACHABILITY BY HOP COUNTS

STATE / CONTEXT META DATA

INTEREST BY
<ORG_ID><URN>
<ROLES><DATA_CLASS>

Multicast

Single Data Stream

WORKFLOW
<CONTENT>
<FILTERS>

ACTIONS
ADD / DROP
JOIN / MERGE

AGILE ADHOC GROUP / UNGROUP

</TAGS>

</StratML>
</IODEF RID>

STRUCTURED
<CONTEXT>
EXCHANGE

TIME TO LIVE TTL

STATE SNAPSHOTS

Content Library

<TIME STAMP>

<FILTERS>

<ORG_ID>

</URN>

<DATA>
{"CLASS_TYPES"}

<ROLE>

<RULES>

RULE: IF UNIT / SENSOR NET = / < N members / platforms, then show AS Non Mission Capable or if no reports within n cycles, UNIT = STALE, NMC. IF NMC, Take ACTION based on statistics = drop, merge, add

WHO, WHAT, WHERE
HOW OFTEN, HOW MUCH
SNAPSHOT SYNC DELTAS

USPTO APPLICATION 13,573,002 The Heart Beacon Cycle Time – Space Meter, Applique' Overlay

GIZMAG: New NASA network poised to bring internet to entire solar system

SCt 573 ALICE CORP VS CLS BANK PHYSICAL MEMES

INTERNET TCP/IP "PING", "HOPS", "PACKETS", FRAMES = METAPHOR

TIME / DISTANCE SERVICE LEVEL AGREEMENT SLA / O Operations

IEEE 802.15.4 OASIS MQTT TELEMETRY TRANSPORT

IEEE 802.11 HOP BY HOP CONTROL

Unused Resources / Unmet Needs

IEEE 802.1AG HOP BY HOP DETECTION

vector

UNUSED RESOURCES

UNMET NEEDS

/localhost/nfd/fib/add-nexthop

Geo-Spatial Temporal Metrics, Meters

DISTANCE

INFO SERVICE

Time Series

Value

Time

IDMaps

SonarHops

5

4

3

2

1

RISK

602

+3

+ 2

+ 1

Null

0

+ 1

+ 2

+3

PING

WATER DROP IN POND MEME IS SONAR NAVY METAPHOR / MEME

Δ δ

NDN </INTEREST>

NDN {"DISTANCE"}

NAMED DATA NETWORKING

PAUL REVERE

LINEAR, SEQUENTIAL

RADIUS

INTENSITY

WATER DROP IN POND MEME

603

NULL

+1

+2

IEEE C37.118 Harmonization & Sync heartbeat update Interval

TCP/IP HOP BY HOP COUNT

Attribute Series

t_1

t_2

t_3

INTEREST

DISTANCE

Geo Spatial Temporal Series

Energy Attenuates over Distances

CLOSER SOURCE CHEAPER RATE

TESLA

Micro Grids Closer - Cheaper

BLOCKCHAIN MICROGRIDS

Spatial Econometrics

TIME-SPACE BEACON

INFOCON

5 4 3 2 1

INFORMATION CONDITION

METRICS / METERS

TRADE WITH EARTH

???

Spaceship Earth Signals & Telemetry Annex

bitcoin

R. buckminster fuller

operating manual for spaceship earth

SIRIUS DISCLOSURE

ASTEROID BELTS = RARE MINERALS

MOON = HELIUM 3

"Numbers are the Universal Language offered by deity to humans as confirmation of the truth"

MARS

MERCURY

VENUS

EARTH

MAIN ASTEROID BELT

Farther = More Cost

➢ Fuel, Resources

Service Level Agreements

STOCHASTIC HARMONIZATION

Alpha Numeric

Brevity Codes

SYNTAX LEXICON

K00.99

FIREFLY-HEARTBEAT ALGORITHM UNIVERSAL EVENT MESSAGE BUS

TROJAN ASTEROIDS

JUPITE

ANDERSON INSTITUTE

ERLANG TIME- SPACE METRICS

43 22 13 0 1.5 2.7 5.2

Light minutes

Astronomical units

FIREFLY – HEARTBEAT ALGORITHM MESSAGE EVENT BUS

EPOCH / TIME CYCLES / INTERVALS

cycle n

n + 1

n + 2

Q: Which meme describes the myriad blockchain consensus algorithms the most comprehensively that uses an algorithm (based on nature = "shortest path to the knowledge of truth Luxor Temple) enabling distributed system of systems geo-spatial, UTZ Universal Time Zone temporal, semantic - syntactic sync, OPSCODE brevity code, data element & symbol (for A.I. man – machine interface) consensus?

Blockchain Consensus Algorithms & Mechanisms

In the world of blockchain consensus algorithms, consensus is the HEART OF THE BLOCKCHAIN NETWORK. It's main purpose is to achieve agreement on transactions among a distributed system (s)

Proof of Formulation: *PoF:* generation / propagation of blocks using a previously agreed sequence between participants of the generation of blocks, formed by two groups: a generator group and/or Formulator and a group of synchronization.

SOURCE: https://developcoins.com/blockchain-consensus-algorithms

STABLE PROTOCOL THREE MAIN TYPES:
DeFi-Native: Cap Labs, Elixir, Level
Collateralized Debt Positions: Ducat, Felix
RWA-Backed:, EAnzen, Superstatethena (UStb update)

1) DeFi-Native collateral backing: stablecoin engine produces redeemable tokens of various denominations (USD, BTC, ETH, etc) system of external agents, such as market makers, MEV actors and RWA protocols, to access collateral and generate independent yield on behalf of holders. These actors keep profits over a predetermined threshold, incentivized to earn as much as possible. behavior is kept in check by security delegations from restaking protocols, support good actors, penalize bad ones

2) Collateralized Debt Positions (CDPs)

CDP protocols allow users to borrow assets by locking up collateral. When a user creates a CDP, they deposit a certain amount of ETH, BTC, USDC, or other assets into the protocol to borrow a proportionate amount of another asset, in this case a stablecoin. If the value of the deposited collateral falls below a specified threshold (loan-to-value level or collateral ratio), the CDP becomes under-collateralized and is recalled, or liquidated, with the protocol automatically selling off the underlying assets to repay the debt and maintain the stability of the system. After the underlying collateral is liquidated, the user usually gets to keep the asset they've borrowed, minus some kind of liquidation penalty.

3) RWA-Backed by off-chain real-world assets

- Reuse, mod of System of systems engineering framework, Syntax Lexicon Library data elements
- STRUCTURED DATA EXCHANGE Reuse brevity codes mapped to 2525D symbol sets comprised of 300 + message sets for A.I. - machine Block-Time DLT arbitrage among Trade Federations </Org_ID> {"URN"} </URN> = COMMODITY

Spatial / temporal UTZ synchronization, stochastic harmonization, Time - Space Distance Estimation Service Common Consensus Algo meme Eco sustainable incentives

"We can synchronize ourselves, DAO Trade Federations in time - space for common purposes" Eco sustainable, Equitable Economic econometrics.

ERC 20 TOKENS STANDARDS LIST

USPTO 13/573,002 LIST

All things net, net of money formed with 1. Epochs 2 Syntax

THE BITCOIN BLOCKCHAIN FOR DUMMIES

What is needed is an electronic payment system based on cryptographic proof instead of trust, allowing any two willing parties to transact directly with each other without the need for a trusted third party e.g., a bank.

Satoshi Nakimoto Bitcoin Paper

Satoshi Nakamoto

Craig WRIGHT a.k.a. Satoshi Nakamoto

"THE VALUE OF BITCOIN IS TIME ITSELF"

Wright Brother's 1st Flight Cape Hatteras Outer Banks

"THE SOLUTION WE PROPOSE BEGINS WITH A TIME STAMP SERVER"

3. Timestamp Server

The solution we propose begins with a timestamp server. A timestamp server works by taking a hash of a block of items to be timestamped and widely publishing the hash, such as in a newspaper or Usenet post [2-5]. The timestamp proves that the data must have existed at the time, obviously, in order to get into the hash. Each timestamp includes the previous timestamp in its hash, forming a chain, with each additional timestamp reinforcing the ones before it.

Bitcoin Protocol for Dummies

Part 4 Timestamp Server

alphanumeric string a.k.a hash

Event Bus

"All things net, net of money are formed with 1) epoch time cycles 2) Syntax parsed as instructions

"THE VALUE OF BITCOIN IS TIME ITSELF"

Event Bus

JapanNet Crypto Time Authentication Service (Timestamp Service)

peer-to-peer time stamp distributed server generates computational proof of the chronological order of transactions

MERKLE: Summary built from block's transaction ID's

Header - Contains service information (version info, nonce, previous block id and timestamp). {"Org_ID"}
Merkle - A summary built from the block's transaction identifiers.
Transaction's id list - list of transaction's identification hashes that was included into the block's merkle tree

All things internet of money are formed w CPU time cycles used to process instructions / code syntax

WIRED

"BITCOIN MAKES MONEY PROGRAMMABLE. MONEY IS SIMPLY DATA"

USPTO 13/573,002
HEART BEACON CYCLE
TIME – SPACE METER
STRUCTURED DATA EXCHANGE

Alice Corp. v. CLS Bank International, 573 U.S. 134 SCt 2347 (2014) is a 2014 decision of the United States Supreme Court about patentable subject matter (patent eligibility).[2] The issue in the case was whether certain claims about a computer-implemented, electronic escrow service for facilitating financial transactions covered abstract ideas ineligible for patent protection. The patents were held to be invalid because the claims were drawn to an abstract idea, and implementing those claims on a computer was not enough to transform that idea into patentable subject matter.

BLOCKCHAIN = TIME / SYNTAX

"BITCOIN IS A LANGUAGE / BITCOIN'S VALUE IS TIME ITSELF"

STATE SNAPSHOT

USPTO 13/573,002
PHYSICAL MEME
MAIN EMBODIMENT

RULES
Metrics

Δδ

ROLES
Meters

Multi-Meme Multi-Meter

TIME EPOCH CYCLES

State Meta Data Snapshots

Blocktime Arbitrage MTL (machine trust language) time primitives might be assigned to a micropayment channel DAPP as a time arbiter. In blocktime, the time interval at which things are done is by block. This is the time that it takes blocks to confirm, so blockchain system processes like those involving smart contracts are ordered around the conception of blocktime quanta or units. Since blocktime is an inherent blockchain feature, one of the easiest ways to programmatically specify future time intervals for event conditions and state changes in blockchain-based events is via BLOCKTIME. Universal blocktime source example: a procedure call to NIST or other time oracle.

BLOCKTIME: A General Temporality of Blockchains Blocktime as blockchains' temporality allows the possibility of rejiggering time and making it a malleable property of blockchains. The in-built time clock in blockchains is blocktime, the chain of time by which a certain number of blocks will have been confirmed. Time is specified in units of transaction block confirmation times, not minutes or hours like in a human time system. Block confirmation times are convertible to minutes. Conversion metrics might change over time. Network Economies: Economic System as Configurable Parameters

The current standard time common throughout the world is based on a 24-hour clock, with zones that are are either 12 hours ahead or behind **Coordinated Universal Time (UTC)**. However, these time zones are decided upon by individual governments, without overall coordination and can even extend fourteen hours ahead UTC.

The proposed **Universal Timezone System** would do away with all these different time zones. Instead, it would be the same time all over the world, all the time.

ERLANG

Erlang programming language / mini OS massively scalable high availability, real-time Erlang's runtime system built-in concurrency distribution, fault tolerance

Ericsson Open Money For Society Patent App

20130166398 "System And Method For Implementing A Context Based Payment System."

ERICSSON ERLANG API FOR BLOCKCHAIN ERICSSON

"BITCOIN MAKES MONEY PROGRAMMABLE. MONEY IS SIMPLY DATA"WIRED MAG

"BITCOIN IS A LANGUAGE" "ITS VALUE IS TIME ITSELF" ----DIGINOMICS

"It is our vision that one day everyone with access to a mobile phone will be able to spend, send and receive money as easily as sending a text via SMS" "When money is open, the way we send, spend and receive money will change forever"

- coordinate 1000's of virtual machines
- ...distributed Dbases RIAK, CouchDB
- ...real time data dashboards
- ...service oriented software architectures
- .. server, API endpoints . RabbitMQ
- ..distributed, multi-node architecture.
- protocol-aware load-balancer, stateful binary comm

Functional Sequential Erlang

- Data types:
  - Integers (incl. BigNums), floats, atoms
  - tuples/records, lists/plists, binaries, funs
  - Maps (added in R17)
- single assignment
- pattern matching & guards
- closures (anonymous function data type)
- list comprehensions
- bit-syntax & binary comprehensions
- tail recursion & tail call optimization (TCO)

SORTING ALGO'S

Rho ratio *Arrival Rate* Δδ *Service Rate per unit time*

queueing systems wait times stochastic processes, function scheduling Start, Stop TTL

TIME Function

distributed "noSQL" database,embedded right into Erlang, supports **indexing, replication, transactions, and fail-over** Fast ETS in-memory, and DETS persistent on-disk database

Mnesia database ("Organization_ID"} Global name resolution

HFT START
HFT STOP
SESSION TTL

STOCHASTIC HARMONIZATION

Proof-of-Work: users perform some form of work to participate. Work must be difficult for the client but easy for the server/network to verify. POW determines the approximate time between blocks = rate that new bitcoins are created. Work is submitted as a message/timestamp payload with a nonce value. Payloads are made unique through use of public key encryption or address. Nonce allows checking the work

TIMESTAMP marks the point that work started. Additionally, it contributes to the uniqueness of the work by an individual miner

THROTTLE equivalent to difficulty.
•target = maximum value of 8 bytes (2^64) divided by the difficulty.

State Snap Shots

NONCE increments from 0..N until the target is met.

GUESS stores the guess
Effectively, it begins at infinity.

FIREFLY-HEARTBEAT ALGORITHM
STOCHASTIC HARMONY ACROSS TIME ZONES

MESSAGE ex:
shing string
•Hash Table

300+Message Templates

POW PAYLOAD : COMBINATIONS OF ENCRYPTED SYNTAX

CLOCK FACE 360'
90 / 90 / 90 / 90

BASEBALL "DIAMOND"

A diamond Is a square Is a block in 3D

Satoshi Nakamoto: "The solution we propose begins with a TIME STAMP SERVER

2nd Base

ALICE Corp VS CLS BANK SC 573 US 134 2347

CLAIMS MAY NOT DIRECT TOWARDS ABSTRACT IDEAS

Physical = Opposite of abstract = ALICE

HEART BEACON CYCLE TIME – SPACE METER USPTO 13/573,002

MACRO CYCLES

RULES / ROLES
INSTRUCTIONS
WORKFLOW
UMPIRE
COACH

90 feet

Blockchain / crypto currency increments

90 feet

Blockchain BLOCK in 3D = CUBE
Cube has Length, Depth, Height, Volume

3rd Base
STATISTICIAN
Metrics, Meters
Stat Mean Value Index

{"URN"}
{"ORG_ID"}
{"URN"}

UNIVERSAL HEARTBEAT MESSAGE EVENT BUS

first base
RUNNER
Message Bus

3 X 5
HASH TABLES
STATE META
DATA SHARDS

90 feet

SETTLEMENTS / EXCHANGES = TAXABLE EVENTS AKIN TO PROPERTY

IRS #1421

I.R.S.

90 feet

FIX {"108"}
FLASH MESSAGE EVENT BUS

Firefly – Heartbeat Algo
Stochastic Harmonization
EVENTS

State Meta
Data Snapshots

Survey Point

MICRO CYCLES

home plate

TIME STAMP SERVER

Epoch Time Cycles

A BASEBALL DIAMOND IS A SQUARE. HBC USES A BASEBALL METAPHOR TO DESCRIBE METRICS, METERS. ROUNDING BASES FORM A BLOCK. METRICS, METERS & SURVEY METHODS MEASURE COIN MINING COMPLETION % AWARDS

Euclidean Geometry

STRUCTURED {"CONTENT"} TEMPLATES

Attribute Series

Digital Asset Modeling Language DAML

Contract Description Language CDL

NAMED DATA NETWORKING

Time Series

Value

Time

SYNTAX, SYMBOLS
LEXICON LIBRARY

{"INTEREST"}
{"DISTANCE"}

IDMaps
SonarHops

FIX {"108"}

time

</INTEREST>

distance

LOGIC – FILTERS

CODE SEQUENCE

ROLES / RULES

NDN

1: prove coin ownership <Org_ID> Coin Issuer
2: # coins sent where, when Lat / Long, DTG
3: NIST Random # Beacon Non-Repudiation
4. Issuing {"Org_ID"} adjudicates w buyers

Firefly – Heartbeat Event Bus

TRANSACTIONS PER CYCLE METRICS

COMPUTER CHIP TIME EPOCHS

cycle n → n + 1 → n + 2

SPATIAL TEMPORAL Series

cycle n → n + 1 → n + 2

FIREFLY-HEARTBEAT ALGORITHM EVENT BUS

PROOF-OF-STAKE

Stake-Time algorithm favors both # of coins held how often, frequently coins are staked

Velocity based selection PoSV encourages velocity i.e. coin movement between people Vs hoarding.

O'REILLY
Time Series Databases

UXTO

Mined Bitcoins

Survey Methods

Proximity Beacons

MICRO-CYCLES

Unmined Bitcoins

CAIFNDAR

Coin Age proof-of-stake system combines randomization with the concept of "coin age," a number derived from the product of the number of coins times the number of days the coins have been held.

Randomized block selection randomization predicts following generator by using a formula that looks for the lowest hash value stake size

I.R.S.

IRS Memo #1421
Bitcoin purchase = property

Voting based selection Instead of only using the stake size, the block generators can be selected by votes ex: League MVP

Voting Based Selection: stake size & block generators selected by votes

VOTE

Little League EST. 1939 BIG LEGACY 75 YEARS

UTXO: unspent transaction output'. bitcoins sent somewhere but not yet spent. Unspent transaction output set= latest STATE of every Bitcoins ever mined" % Block Mined / % Block owned

ripple

real-time gross settlement system, currency exchange remittance distributed net

FEDERATION CONSENSUS ALGORITHM / PROTOCOL
LIQUIDITY ON DEMAND

A.K.A Ripple Transaction Protocol or Ripple protocol, built on a distributed open source Internet protocol, consensus ledger and native currency called XRP. Ripple enables "secure, instant and nearly free global financial transactions of any size with no chargebacks." Ripple supports tokens representing fiat currency, cryptocurrency, commodity or any other unit of value such as frequent flier miles or mobile minutes. Ripple is based around a shared, public database or ledger, which uses a FEDERATION based consensus process that on demand liquidity backed by cooperative backing

Connects to receiving bank's Ripple Connect to exchange KYC, risk info, fees, payment details, expected time of funds delivery Provides information about total costs of the transaction.

Workflows are serially executed Except first two work flow are workflows are based on event pull model

1. FEDERATION: Latin: foedus, foederis, covenant, union of partially self-governing states or regions under a central (federal) government
2. A league or confederacy. Individuals / groups retain AUTONOMY
3. A federated body formed by nations, states, and... unions

each retaining control of internal affairs

Federation Gateway

{"GLOBAL"}
{"SHARED"}
{"DOMAIN"}
{"COMMUNITY"}
{"PRIVATE"}
{"GROUP ID"}

Net joins, drops, splits, merges, moves
Agile, adhoc NETOPS Vs acquisition preserves the

FEDERATION CONSENSUS PROTOCOL

LIQUIDITY, ORGANIZATIONAL INTEGRITY OF TRADE FEDERATIONS

Neutral transaction protocol

EVENT BUS

LOCKED QUOTED ACCEPT / DENY In Progress SUCCEEDED

{"108"} HEARTBEAT SYNC DELTA STATE META DATA SNAPSHOTS

MATCH EVENT REPORTS TO CLOSEST HEARTBEAT CYCLE

FLASH HEARTBEAT MESSAGES {"108"}

Sync to Closest Heartbeat

HASH NONCE

FIREFLY-HEARTBEAT ALGORITHM

MICRO-CYCLE STATE META DATA SNAPSHOTS

STOCHASTIC HARMONIZATION ACROSS UTZ TIME ZONES

Byzantine Fault-Tolerant State Machine Replication

BFT-SMaRt dynamic distributed system processes are divided in two nonintersecting subsets: replicas and clients. Each system process has a unique identifier. During dynamic system execution, a sequence of views is installed to denote the reconfigurations due to replicas joins and leaves. A view is composed by a set of replicas identifiers.

Modularity is achieved using a set of building blocks(or modules)containing the core functionality of BFTSMaRt. Blocks are divided in three groups: communication system, state machine replication and state management.

BFT-SMaRt needs an eventually synchronous system

Total order multicast is achieved using the Mod-SMaRt protocol and with the Byzantine consensus algorithm Clients send requests to all replicas in cv, and wait for replies. replicas store each batch of ordered requests to a (stable) log and, periodically, take snapshots of the application state and store it in stable memory.

USPTO 13/573,002 HEART BEACON CYCLE TIME-SPACE METER

USCt ALICE CORP V CLS BANK
PHYSICAL = OPPOSITE OF ABSTRACT

DERIVED FROM BATTLEFIELD DIGITIZATION DISTRIBUTED AUTONOMOUS ORGANIZATION DAO SYSTEM OF SYSTEMS

FEDERATED ID / ORGANIZATIONAL IDENTIFIER {"ORG_ID"}

ADDS, JOINS, DROPS, MOVES TO / FROM DAO
CHANGES IN STATE VIEWED IN "APPLIQUE' OVERLAY VIEWS

K00.99 HEARTBEAT SYNC DELTA STATE META DATA SNAPSHOTS

FIREFLY-HEARTBEAT ALGORITHM

Bitcoin Blockchain Multi-Meme Multi-Meter

MICRO-CYCLE STATE META DATA SNAPSHOTS AGGREGATED INTO MACRO OPERATION CYCLE RECONFIG MESSAGE

BUILDING BLOCKS:
- TIME CYCLE EPOCHS
- SYNTAX INSTRUCTIONS

- LINEAR, SEQUENTIAL
- GEO SPATIAL, TEMPORAL

Firefly inspired Heartbeat Synchronization nodes strive to sync in a distributed system. Nodes generate periodic "heartbeat" events approximately at the same time. It differs from classical clock sync in that nodes are not interested in counting cycles to agree on the ID of the current clock cycle. There is no requirement to sync during a cycle length In real time as long as the length is bounded and all nodes AGREE ON IT EVENTUALLY"

In a proof-of-stake network, it is the number of coins held in a wallet that determines the "weight" of the user the likelihood for the user to receive the block reward. In a Proof-of-Weight consensus mechanism, any value, not just the amount of coins held, is used to determine the "weight" of a user.

The Volumetric Weight is often referred to as dimensional weight

Volumetric Weight = [Width x Length x Height]

TIME – SPACE MEASUREMENTS OF TOKENIZED COMMODITIES, SECURITIES… STOCHASTICALLY HARMONIZED ACROSS UTZ Universal Time Zone

On the Filecoin blockchain, for example, the amount of IPFS data that a user is storing is used as the weighted value.

OpenBazaar open source decentralized peer to peer network online commerce —using Bitcoin —no fees and no restrictions

- Creates an online store for users to sell goods for Bitcoin
- Connects these stores directly to each other on a global network
- Users browse individual stores, search for products across whole network
- A buyer directly connects, purchases good from the merchant using Bitcoin
- Bitcoin payments via escrow protect merchants & buyers during trade

OPENBAZAAR.ORG

BLOCKCHAIN ARBITRAGE

SLA

CLOSER = < $

CLOSER = < CO2

OpenBazaar is a different approach to online commerce. OpenBazaar connects buyers and sellers directly. Because there is no one in the middle of your transactions there are no fees, no restrictions, no accounts to create, and you only reveal personal information you choose.

PROJECT PHILOSOPHY: ***MAKE TRADE FREE***

Mission: ***shift trade to a decentralized platform***

•**VALUES:**

Demurrage Fees

TERRATRC TRADE REFERENCE CURRENCY

"Money of Peace"

Commodity / Currency Index

Free, open markets:

Creating open, competitive markets for services that cannot be perfectly solved with technology

currencyindex

COMMODITIES

•**Privacy** </Org_ID>

HASH Values

Nonce Values

</Org_ID>

- **Users should fully control their data. Users have freedom to reveal as much personal identifiable information as they want, when they want**

</DATA>

("FILTERS")

Bitcoin: OpenBazaar transactional currency

Cyrptographic Security

- **tamper-proof agreements**
- **1) minimize potential disputes**
- **2) fast-track dispute resolution**

NIST Beacon

A Public Randomness Service

Non-Repudiation

TERRA TRC

HEART BEACON CYCLE

USPTO 13/573,002

TIME – SPACE METER

Δ δ

COMMODITIES ECONOMIC HEARTBEAT

("108")

STAT MEAN VALUE PULSE

REAL WORLD ASSETS RWA

Federation Gateway

ORG ID

FIREFLY – HEARTBEAT ALGO

SYNC EVENTS

Δ δ

TO CLOSEST HB CYCLE

UTZ SYNC

STAT MEAN VALUE INDEX

CONTRIBUTIONS TO STATISTICS

Price Indexes in Time and Space

SchellingPoint

DON: DECENTRALIZED ORACLE NETWORKS

Explicit Staking

Chainlink nodes lock up LINK tokens as collateral that can be slashed for malicious and undesirable behavior.

Chainlink's explicit staking model 's goal is to achieve a super-linear staking impact—a mechanism where malicious actors are required to have a budget significantly larger than the combined deposits of all nodes within a DON, creating increasingly greater security guarantees for high-value smart contract applications in a cost-efficient manner.

Explicit staking in Chainlink 2.0 oracle reports reflect the state of specific real-world events outside a blockchain (off-chain).

Chainlink's explicit staking mechanism protects against a broad range of attacks, including advanced strategies like prospective bribery, in which nodes are targeted according to their role in the network, such as those selected for report adjudication.

Behind each DON is a service agreement that will define the number of LINK tokens each oracle node is required to stake and key performance requirements, such as how far an individual node's response can deviate from the aggregated value and how far the aggregated value in an oracle report can deviate from the correct value it should represent. The service agreement can also define other parameters such as the data sources used, how often updates should occur, how much each node is paid, and more.

ALERT LEVEL >
> NEWSCAST ZONE

Outputs produced by a DON are structured into reporting rounds, where each round involves the creation of a new oracle report containing each node's individual response for a particular piece of data (e.g. the price of ETH/USD), with all the individuals responses aggregated into a single value (e.g. taking the median). A DON network's service agreement defines how each report should be generated & conditions in which a node's stake can be slashed.

Proof-of-activity PoA is a combination of Proof of Work / Stake blockchain consensus algorithms:

Example of Proof-of-Activity (PoA)

HEART BEACON CYCLE 13/573,002

Decred (DCR) is the most well-known cryptocurrency that uses the PoA consensus mechanism. With Decred, blocks are created about every five minutes.2 The mining process for Decred begins with nodes (computers that participate in the network) looking for a solution to a cryptographic puzzle with a known difficulty level in order to create a new block. Once the solution has been found, it is broadcast to the network. The network then verifies the solution. At this point, the system becomes a PoS. The more DCR that a node has mined, the more likely they are to be chosen to vote on the block. (In DCR's blockchain, stakeholders earn tickets that grant them voting power in exchange for mining DCR.) Five tickets are chosen pseudo-randomly from the ticket pool; if at least 3 of the 5 vote "yes" to validate the block, it is permanently added to the blockchain. Both miners, voters are rewarded with DCR.

Veritaseum™

"THE FINANCIAL NOSTRADAMUS"

REGGIE MIDDLETON

Veritaseum™ "The Unbreakable Promise!"

ULTRA COIN

USPTO 13/573,002

Heart Beacon Cycle

Time – Space Meter

VERITAS TOKENS P2P Capital Market smart contracts Eco Economic HEARTBEAT

Decentralized Trading Platform DAO ORACLE access conventional, legacy financial data to price, value, trade & settle OTC, P2P financials

INFOCON 5 4 3 2 1 INFORMATION CONDITION

STATISTICAL MEAN VALUE INDEX PULSE

Zero Trust Transaction: money performs I.A.W. to terms agreed to by parties. Ex: purchase of widget from retail store where widget must be delivered to person B on TIME X, in Y condition at PLACE Z or person A does not get paid. Stock, currency, commodities, letters of credit, insurance underwriting, trading, intellectual property…

GDP INDEX ECONOMY K% RULE

Cost = stated rates that fluctuate with VeUSD exchange rate. Veritas holders get priority. The ability to redeem Ve against USD gives clients instant value.

DAO Distributed Autonomous Organization Investor Pools

DeFi Ve TOKENS

VeriDAO

{"TAGGED"} CRYPTO

{"Org_ID"} {"URN"} {"Tagged_Bitcoins"}

Pay: Expiry:

« Switch » INTC Δ δ Ve 16w Advanced

#DeFi All Market Orders {"108"} Search {"108"}

UTZ SYNC

STOCHASTIC HARMONIZATION

Closer = cheaper

Firefly – Heartbeat Algorithm

Neural Net Emulation

Heartbeat Flash Messages Precedence Processing

Collateral Notional Expiry

FIREFLY HEARTBEAT ALGO EVENT MSG BUS

As long as INTC decline outpaces QCOM, you get paid. QCOM can be replaced with GOOG, or even AAPL although I feel AAPL will have its issues in the upcoming quarters as well.

{"Org_ID"} {"Tagged"} Crypto {"URN"}

NIST TIME BEACON

UTZ Time Zone Sync

"LENGTH OF REAL TIME CYCLE IS ARBITRARY AS LONG AS NODES EVENTUALLY AGREE"

STOP

TTL

QRNB

Non Repudiation

Time – Space Meter Metrics

SYNTAX LEXICON OPSCODE

Brevity Codes mapped to symbols sets for A.I. / Man – machine interface / interop

Rosetta Stone

Proof of Authority

Not pay to play, Node identiy is kept as stake

{"GROUP ID"}
{'Org_ID"}

A PoA network are secured by validators, that are selected democratically by existing validators. The nodes on the PoA network are rewarded for validating the transactions on the network. The identity of the validator is kept anonymous by encryption and secured cryptographically. It is revealed only as a negative reinforcement when the validator processes a fraudulent or a malicious transaction.

Federation Gateway

A notary license verifies the identity of the person formally, a notary license is released by the Federation / Government afte extensive verification. The identity of the validator is kept for cross-referencing with the notary data and blockchain data

Parity supports a Proof-of-Authority consensus engine. Proof-of-Authority is a replacement for Proof-of-Work, and can be used for private or centralized chains. PoA as tested by a Kovan test network improves outdated economic models.

1. FEDERATION: Latin: foedus, foederis, covenant, union of partially self-governing states or regions under a central (federal) government
2. A league or confederacy. Individuals / groups retain AUTONOMY
3. A federated body formed by nations, states, and... unions

each retaining control of internal affairs

Federation Gateway

{"GLOBAL"}
{"SHARED"}
{"DOMAIN"}
{"COMMUNITY"}
{"PRIVATE"}

Net joins, drops, splits, merges, moves

Agile, adhoc NETOPS Vs acquisition preserves the CHANNEL

SAWTOOTH LAKE POETIC CONSENSUS PROOF OF ELAPSED TIME: POET

*"PoET for 'Proof of Elapsed Time', is a lottery protocol that builds on trusted execution environments (TEEs) provided by Intel's [Secure Guard Extensions] to address the needs of large populations of participants. The second, **Quorum Voting,** is an adaptation of the Ripple and Stellar consensus protocols and serves to address the needs of applications that require immediate transaction finality."*

PROOF OF ELAPSED TIME

P
O
E
T

QUORUM VOTING PROTOCOL

Voting Based Selection: stake size & block generators selected by votes

Voting based selection Instead of only using the stake size, the block generators can be selected by votes

ex: League MVP

MVP

Robert's Rules quorum = minimum # of voting members who must be present at meetings to conduct business of the group

TOURNAMENT LEAGUE BOARD

SCt #573 ALICE CORP V CLS BANKPHYSICAL UNIVERSAL MEME

"BITCOIN IS A LANGUAGE"

FIREFLY-HEARTBEAT FLASH MESSAGES UNIVERSAL EVENT BUS

HASH TABLES / NONCE VALUES

Capture ledger's state $\Delta\delta$

Transaction language changes ledger state

Consensus, transaction acceptance protocol

NEO Delegated Byzantine Fault Tolerance (dBFT)

Time Series

Topology: Hierarchical Star
Architecture: Distributed
Consensus: dBFT
Network: TCP/IP
Encryption: ECDH

f = 1 OR 0.66

If f NOT 1 OR < 0.66
There is no consensus

PROOF OF ELAPSED TIME

Consensus Order

No collusion between individuals or entities is possible. Participants in the network validate transactions adding to the ledger have no affiliation or relationship (political, adversarial, etc.) with the transaction or its participants. **Only a permissionless platform can meet this set of criteria.**

Specifically, a random selection algorithm called RS is developed to cooperate with the voting mechanism, which can effectively reduce the number of nodes participating in the consensus process. Our proposed scheme is characterized by the unpredictability, randomicity and Impartiality, which accelerate the system to reach consensus on the premise of ensuring system activity. ✓

NON REPUDIATION

HASHGRAPH
Directed Acyclic Graph DAG

Hashgraph consensus algorithm for replicated state machines

- Consensus Event Time Stamps
- State Meta data consensus order
- *Virtual voting:* each member has a Hashgraph copy

- Famous witnesses

data structure that records who gossiped to whom in what order

The Heart Beacon Cycle Time – Space Meter
Adaptive Procedural Template Checklist
Heartbeat Sync Delta state meta data
structured data exchange snapshots
300 + Use Case message template sets
Rosetta Stone Syntax lexicon Coder's guide

USPTO 13/573,002 Heart Beacon Cycle Time – Space Meter
sawconcepts.com/index Geo-Spatial Temporal Intensity Metrics

Gossip In Bitcoin: transactions and mined blocks are gossiped.
Consensus is enhanced via "gossip about gossip"

DAG "Directed Acyclic Graph" large number of blocks arrive at the same time. DAG system reaches consensus leveraging "Gossip"… information spread by a computer calling up other computers at random, sharing everything it knows

Community members reach consensus agreement on events / transactions
order inside events, and agree on a timestamp for each event /transaction

DAG finite **directed graph**
= no **directed** cycles

Consensus Order

Hashgraph
Member
Event
Transaction
Consensus
Order
Timestamp
Gossip protocol
Self-parent
Other-parent
Graph Hash
Hashgraph

Hash
Nonce

Synchronous

Asynchronous

Micro-Cycle
State Meta
Data Snapshots

Round created 0 / 1
Witness
Famous witness
Election
Vote
See
Strongly see
Supermajority
Decide 0 / 1
Round created
Round received
Consensus timestamp
Consensus order

IDMaps assists Network Time Protocol (NTP) servers establish long term peering relationships

FIREFLY HEARTBEAT Synchronization Algorithm

FIREFLY – INSPIRED HEARTBEAT SYNCHRONIZATION ALGORITHM

"LENGTH OF REAL TIME CYCLE IS ARBITRARY AS LONG AS NODES EVENTUALLY AGREE"

Proof of Burn

Proof of burn (POB operates on the principle of allowing miners to "burn" virtual currency tokens. They are then granted the right to write blocks in proportion to the coins burnt.

Iain Stewart, the inventor of the POB algorithm, uses an analogy to describ the algorithm: burnt coins are like mining rigs. In this analogy, a miner burns their coins to buy a virtual mining rig that gives them the power to mine blocks. The more coins burned by the miner, the bigger their virtual mining "rig" will be.[2]

To burn the coins, miners send them to a verifiably un-spendable address. This process does not consume many resources (other than the burned coins and ensures that the network remains active and agile. Depending upon the implementation, miners are allowed to burn the native currency or the currency of an alternate chain, such as Bitcoin. In exchange, they receive a reward in the native currency token of the blockchain.

Volume / Size
+ / - Of rig

You can send out transactions to the network that will burn your own cryptocurrency coins. Other participants can mine/burn on top of your block, and you can also take the transactions of other participants to add them to your block. Essentially, all of this burning activity keeps the network agile, and participants are rewarded for their activities (both burning their own coins and burning other people's coins).

To prevent the possibility of unfair advantages for early adopters, the POB system has implemented a mechanism that promotes the periodic burning of cryptocurrency coins to maintain mining power. The power of burnt coins "decays" or reduces partially each time a new block is mined. This promotes regular activity by the miners, instead of a one-time, early investment. To maintain a competitive edge, miners may also need to periodically invest in better equipment as technology advances.

Heartbeat Event {"burn"}

SLA = increase mining rig volume

IEEE C37.118 Time Synchronization
Harmonization Heartbeat update Interval
PMU data time-stamp measure C37.118

Phase 2: Shared file stores data for 5 tags:
(1) Active ID
(2) Heartbeat 1.
(3) Heartbeat 2.
(4) Device Status 1.
(5) Device Status 2.

TAG		Token Award
{"Org_ID"} ActiveID	[UFO2_ACTIVEID]	</EVENT>
IF1_Heartbeat (IF-Node1)	[UFO2_HEARTBEAT:#]	</EVENT>
IF2_Heartbeat (IF-Node2)	[UFO2_HEARTBEAT:#]	</EVENT>
{"UUID"} IF1_Device Status (IF-Node1)	[UFO2_DEVICESTAT:#]	</EVENT>
{"UUID"} IF2_Device Status (IF-Node2)	[UFO2_DEVICESTAT:#]	</EVENT>
IF1_State (IF-Node1)	[UFO2_STATE:#]	IF_State
IF2_State (IF-Node2)	[UFO2_STATE:#]	IF_State

UNIVERSAL HEARTBEAT MESSAGE EVENT BUS

Proof of Capacity PoC

#1421

consensus mechanism algorithm for mining devices to use hard drive space to decide mining rights, validate transactions

Proof of capacity for mining devices, also known as blockchain nodes, to use empty space on their hard drive to mine the available cryptocurrencies.

Instead of repeatedly altering the numbers in the block header & repeated hashing for the solution value as in a PoW system, PoC works by storing a list of possible solutions on the mining device's hard drive before mining activity starts

Micro-Cycle
State Meta
Data Snapshots

The larger the hard drive, the > possible solution values one can store on the hard drive, the more chances a miner has to match required hash value from his list, resulting in more chances to win the mining reward.

Analogy: if lottery rewards are based on matching the most numbers on the winning ticket, then a player with a longer list of possible solutions will have better chances of winning. Additionally, the player is allowed to keep using the lottery ticket block numbers again and again repeatedly.

Bitcoin purchase akin to property

PoST Proof-of-Spacetime (PoST)

PoST shows that physically storing data (spent "spacetime" resource/allocated storage capacity to the network) over a certain period of time.

Micro-Cycle
State Meta
Data Snapshots

PoST users / nodes must prove that they are spending a certain amount of space for storage.

The proposed **Universal Timezone System** would do away with all these different time zones. Instead, it would be the same time all over the world, all the time.

On / Off Shore

queueing
systems wait times
stochastic processes,
function scheduling
Start, Stop TTL

PROXIMITY BEACONS
BLOCKCHAIN PARSING

Heartbeat Date Time Stamps Sync Pulse

STATE META DATA SNAPSHOTS

BITCOIN BLOCKCHAIN TRANSACTIONS ARE BASED ON TIME SEQUENCING TRANSACTION STATE CHANGES TO DISTRIBUTED LEDGERS

Process transactions by precedence

Attribute Series

TIME Function

Geo
Spatial
Temporal Series

Nicotib

ERLANG

BEACON BROADCAST

MICRO- CYCLES

QUANTUM RANDOM #

Arrival Rate
Queue Forms
Limited Resource
Service Rate

RFID

Time Series

Erlang / Equilibrium
Time – Sync
Algorithms
ROLES RULES

O'REILLY TIME EQUATIONS
Time Series Databases

NIST Beacon
A Public Randomness Service
05:08:57
ATOMIC CLOCK
NON_REPUDIATION

Value
Time

Delay
Utilization
Service Time

ERLANG CALENDAR: Calculate Wait Times
Time Stamp to Date Time Conversion

BITCOIN NG NEX GEN / Heart Beacon Cycle 13/573,002

KEY BLOCKS:
- NO CONTENT = NULL
- LEADER ELECTION

MVP

EVENT BUS

Coder Guide

MICRO BLOCKS:
- ONLY CONTENT
- NO CONTENTION

NDN

MACRO – CYCLES

short deterministic
intervals (10 sec)

MICRO-CYCLES

Metallicus

Programmable
Money Transactions
Intrabank settlements

FedNow 24/7 INSTANT PAYMENTS

PROTON A CHAIN Virtual Machine

CONTRACT C CHAIN Smart contract

PLATFORM P CHAIN Meta Data

EXCHANGE X Cross blockchain

Universal @names Identity / Governance / Resources / Staking

Snowball Consensus

EOSIO computer function emulation
NET, CPU bandwidth, RAM data
Publishing, Voting based not mining

Algorithm
preference := pizza
consecutiveSuccesses := 0
while not decided:
  ask k random people preference
  if >= α give the same response:
    preference := response with >= α
    if preference == old preference:
      consecutiveSuccesses++
    else:
      consecutiveSuccesses = 1
  else:
    consecutiveSuccesses = 0
  if consecutiveSuccesses > β:
    decide(preference)

Delegated Proof of Stake

{"Org_ID"}

PROOF-OF-STAKE

coordinates validators, keeps track of active subnets, SNOWMAN consensus Token representation of real-world resources (e.g., equity, bonds) smart contract rules </URN>

DAG Acyclic Graph Parameters:
n: number of participants
k (sample size): between 1 and n
α (quorum size): between 1 and k
β (decision threshold): >= 1

USPTO 13/573,002

ALL THINGS NET, NET OF $$$
1) EPOCH TIME INTERVALS
2) SYNTAX (not) used in epochs

GENESIS BLOCK: "Layers" = follow on epoch time intervals

SECURITY TOKEN: A DIGITAL ASSET THAT'S BACKED UP BY TANGIBLE ASSETS IN THE REAL WORLD
</URN>
</URN>
</URN>

</ORG_ID>
MVP

"all digital currency networks, the base layer of people generating the blockchain — "miners," "stakers," "witnesses," "validators," or "forgers" get paid"

IOTA: Internet Of Things IOT distributed ledger with microtransactions without fees

Tangle, a directed, ASYNCHRONOUS acyclic graph (DAG) for storing transactions

Contrary to Blockchains, consensus is no longer decoupled, It is an intrinsic part of the system for decentralized, self-regulating peer-to peer network. Transfer value without fees

The iota network is ASYNCHRONOUS. In general, nodes do not necessarily see the same set of transactions. The tangle may contain conflicting transactions. The nodes do not have to achieve consensus on which valid transactions have the right to be in the ledger, meaning all of them can be in the tangle. However, in the case where there are conflicting transactions, the nodes need to decide which transactions will become orphaned. Nodes use the tip (unapproved transaction) selection algorithm to decide between two conflicting transactions. GHOST protocol main ledger = tree

E-GaaS: international blockchain platform for organizing economic, state, social activities of citizens , communities on the basis of smart law, smart contract system. eGaaS offers a comprehensive solution needed for state and business management on the blockchain platform.

WORLD ECONOMIC Heartbeat

{"108"}

ALGORITHMIC REGULATION

HEARTBEAT SYNC DELTAS

INFOCON 5 4 3 2 1 INFORMATION CONDITION

TERRACYCLE

EGAAS

ELECTRONIC GOVERNMENT AS A SERVICE

The Heart Beacon Cycle HBC: an adaptive procedural checklist of form templates, procedures, SOP building blocks useful to form Eco-responsible trade federations Procedural template checklist items links to detailed technical, process… treatises

Distributed digital asset registries were the first projects that used blockchain systems such as databases designed for secure storage of records on real estate property, stocks, copyright and so on. It is assumed hosting any document on the blockchain is equivalent to notarization of its content at a fixed time point.

SYNTAX / SYMBOL

LEXICON LIBRARY

STRUCTURED

DATA EXCHANGE

300 + TEMPLATE FORMS

LOGIC / FILTERS

ALPHA-NUMBERIC

BREVITY CODES

TEMPLATE ENGINE LANGUAGE ETF

NAMED DATA NETWORKING

Time Series Databases

BLOCKCHAIN PARSING

DEMURRAGE FEES

changes, corrections SYNCHRONIZATION

The current standard time common throughout the world is based on a 24-hour clock, with zones that are are either 12 hours ahead or behind **Coordinated Universal Time (UTC)**. However, these time zones are decided upon by individual governments, without overall coordination and can even extend fourteen hours ahead UTC. INCENTIVIZE ECO – FRIENDLY TRANSACTIONS

ENVIRONMENT FRIENDLY ECO INCENTIVES

Neural Net

CLOSER = LESS FUEL

CLOSER = FASTER

G7 Carbon

vector

ON

Named Data Networking

NDN

"INTEREST"}

"DISTANCE"}

STOCHASTIC HARMONIZATION

STAT MEAN

VALUE INDEX

Unused Resources

Int'l Date Line

CO_2 Credits

Unmet Needs

OFF

Sync

To

Closest

FIREFLY HEARTBEAT ALGORITHM

HEARTBEAT EPOCH

FIREFLY EVENT BUS FLASH

HEARTBEAT {108"} MESSAGES

Multi

Meme

Meter

IDMaps

SonarHops

SHORE

STATE META DATA SNAPSHOTS

The proposed **Universal Timezone System** would do away with all these different time zones. Instead, it would be the same time all over the world, all the time.

Microsoft Blockchain modular framework: choose combination of tech best fits Biz domain

AZURE: Core/Kernel/Universal Protocol

Fabric Tier consortium node CryptoDelegate in VM or UTXO Adapter, (Azure, AzureStack, AWS..

Unspent Transaction Output protocols UTXO

Crypto Tokenized Assets Digital Bearer Bonds unique identity for owned artifacts

Utility Cryptlets encryption, time & date events, external data access, authentication "CryptoDelegate" / adapter

Blockchain middleware: identity and operations management, data, intelligence services like analytics and machine learning. New middleware works with existing Azure services, like Active Directory and Key Vault

Blockchain Fabric: Blockchain Gateway Services Interledger-like services to allow for SmartContracts and tokenized objects to be passed between different ledger systems.

Data Services - key data services like distributed file systems (IPFS, Storj, etc) of off-chain data referenced by public keys. Auditing, Advanced Analytics, Machine Learning, Dashboarding services for SmartContracts, Blockchains, Consortia, Regulators

Utility and Contract. Developers can discover and enlist Cryptlets into their SmartContracts to create more robust and trusted transactions. Contract Cryptlets are full delegation engines that act as SmartContract surrogates off the chain. Cryptlets provide execution logic and securely store data in the Smart Contract

MULTI-MEME MULTI-METER

Microsoft

Cloud Supply Chain blockchain

{"URN"} {"URN"} {"URN"} {"URN"} {"URN"} {"Org_ID"}

MYRIAD MEMES MEDIATION

BLOCKCHAIN

OFF-SITE OFF-PAGE CONNECTOR

{"URN"} {"Org_ID"} DAO

IoT Microsoft Orleans

TIME-SPACE EQUATIONS ALGORITHMS BLOCKCHAIN PARSING

ERLANG

ethereum

ETHER: Compensate Resource Contribution

Gas: price to Run contract transactions

Casper is a security-deposit based economic consensus protocol. Nodes = "bonded validators" place security deposit (an action called "bonding") If a validator generates an invalid action, account deposits are forfeited along with consensus privilege. Use of security deposits address "nothing at stake" problem; that behaving badly is not expensive. Casper is an EVENTUALLY CONSISTANT blockchain-based consensus protocol. CASPER favors availability over consistency

Ether hedged against other crypto / FIAT currencies price chang

Firefly - Heartbeat synchronization: nodes in a distributed system generate periodic, local "heartbeat" events approximately at the same time with a goal of all nodes starting / ending cycles at the same time… EVENTUALLY

Txs	State transition:		Txs	State transition:		Txs	State transition:	
0cb4 9f12	123:	400	5581 2fc3	905:	560	7ce6	123:	440
	8723:	0		1141:	8021		1141:	7981
	42:	15776		42:	15775			

SWARM (storage) | WHISPER (messaging) | EVM (consensus)

HEARTBEAT FLASH MESSAGES

BLOCKCHAIN HASH TABLES

UNIVERSAL EVENT BUS

STATISTICAL MEAN SAMPLING

STOCHASTIC HARMONIZATION

MACRO ECONOMIC CYCLES

STAT MEAN VALUE INDEX

SUM, ADD, AGGREGATE

MICRO CYCLE SAMPLING

SPACE-TIME METRICS

STATE META-DATA

BITCOIN MULTI MEME MULTI-METER

HEARTBEAT SNAPSHOTS

DFINITY

RANDOM # BEACON

BLOCKCHAIN NERVOUS SYSTEM

NIST Beacon
A Public Randomness Service
QUANTUM RANDOM #

Each process has mining identity

- Public key with meta data attached

- IDs mediate participation

- Private network: trusted dealer defines list
- Public network: CC security deposit, USCIDs

3 x 5

HBC "ORG_ID"}
{"URN"} CLASS
ASSET TYPE
{"UUID"}
DEVICE TYPE

INDEX CARD="SHARD"

BLOCKCHAIN NERVOUS SYSTEM

HEARTBEAT {"108"} State Meta Data Snapshot Msgs

STATEFUL DECENTRALIZED NET PROTOCOL:
Decentralized process workflows instead of Centralized Server farms

FIREFLY-HEARTBEAT FLASH Msg EVENT BUS

GROUP Signature *is* random number
- Number *selects* next group {"Org_ID"} {"Org_ID"}
- Next group use previous no. as message
- Verifiable Random Function
- Numbers verifiable using group public key
- New values produced in threshold agreement

- Random members {"Org_ID"} {"Org_ID"}

- Each process is a member of multiple groups
- Groups intersect, have +/- 400 members

- BLS signature scheme

- **Math magic…** If 51% of group members broadcast "signature shares" on a message, these are combined to create the group's threshold signature.

HYPER GEOMETRIC PROBABILITY CALCULATOR

CONSENSUS / RANDOM BEACON
Threshold relay chain generates randomness, records network metadata & validation tree "state root". State and updates to state stored on shards…
State transitions passed to Validation Tree

3 x 5

Threshold Relay Chain techniques

Probabilistic Slot Protocol (PSP) When Gh is selected, members start stopwatches
Choosing Leaders Randomness selects priority list block forgers at height h
Short Term Convergence Correct processes build on highest scoring chain
Threshold Timestamping group signs blocks at h until next group appends another

Scalable Global Validation Layer: Each additional level of the tower validates new state transitions applied to storage shard. is built by processes selected by the RANDOM BEACON

USPTO 13/573,002 HEART BEACON CYCLE TIME – SPACE METER

UTZ TIME ZONE SYNC

USCt 573 134 2347

NIST TIME BEACON

FIREFLY FLASHES MSGs EMULATE NEURAL NET

FIREFLY EVENTS = THRESHOLD VALUES

NIST Beacon
A Public Randomness Service
QUANTUM RANDOM #

CLOCK FACE 360'
90 / 90 / 90 / 90

BASEBALL "DIAMOND"
A diamond Is a square Is a block in 3D

Satoshi Nakamoto: "The solution we propose begins with a TIME STAMP SERVER

2nd Base

ALICE Corp VS CLS BANK

SC 573 US 134 2347
CLAIMS MAY NOT DIRECT TOWARDS ABSTRACT IDEAS
Physical = Opposite of abstract = ALICE
HEART BEACON CYCLE TIME – SPACE METER USPTO 13/573,002

MACRO CYCLES

RULES / ROLES
INSTRUCTIONS
WORKFLOW
UMPIRE
COACH

90 feet

90 feet

Blockchain / crypto currency increments

Blockchain BLOCK in 3D = CUBE
Cube has Length, Depth, Height, Volume

3rd Base
STATISTICIAN
Metrics, Meters
Stat Mean Value Index

first base
RUNNER
Message Bus

{"URN"} {"ORG_ID"} {"URN"}

UNIVERSAL HEARTBEAT MESSAGE EVENT BUS

3 X 5
HASH TABLES
STATE META
DATA SHARDS

90 feet

SETTLEMENTS / EXCHANGES = TAXABLE EVENTS AKIN TO PROPERTY

IRS #1421

90 feet

Firefly – Heartbeat Algo
Stochastic Harmonization
EVENTS
FIX {"108"}
FLASH MESSAGE EVENT BUS

State Meta Data Snapshots

Survey Point

MICRO CYCLES

home plate

TIME STAMP SERVER

Epoch Time Cycles

core blockchain code written in Erlang, for distributed, fault-tolerant, soft real-time and highly available non-stop applications.

ERLANG API FOR BLOCKCHAIN

ERLANG

ERICSSON

EVENT BUS FIREFLY INSPIRED NEARTBEAT SYNC

HEARTBEAT FLASH MESSAGES EMULATE NEURAL NETWORKS

Firefly Heartbeat Sync nodes strive to sync in a distributed system. Nodes emit periodic "heartbeat" events at approximately the same time. No need to sync during a cycle as long as the cycle length is bounded & nodes eventually agree

ORACLES: crucial feature for most contracts, whether encoded as text or as code, is the ability to refer to values from the environment. æternity Oracle Machine provides real-world data to the blockchain. Each user can ask questions about the environment. Anyone can answer. Consensus mechanism invoked in case of disagreement.

MIT-licensed modules for easy implementation in blockchain consortiums. Free and open access for developers build on the æternity platform. CROSS – CHAIN ATOMIC SWAPS

AETERNITY CROSS-CHAIN ATOMIC SWAPS CORRESPOND TO HEART BEACON CYCLE'S USE OF BATTLEFIELD DIGITIZATION DERIVED HEARTBEAT SYNC DELTAS $\Delta\delta$

AE Tokens AE are access tokens to the æternity network and act as a unit of account for the resources spent on æternity.

{"URN"} {"URN"}

Aeons: energy for applications implemented on the platform.

ACCOUNTS & IDENTITY: æternity's accounts are permission-less, but allow customization via schema.org's semantic web scheme. Create & own (federated group) / individual identities on the æternity network ("ORG_ID"}

("ORG_ID"}

NAMES (DNS) In the vein of Aaron Swartz' work and Namecoin, æternity features an easy to use name system, that is both decentralized and secure, while still supporting human-friendly, memorable names. The blockchain's state includes a mapping from unique human-friendly strings to fixed-size byte arrays, that are individually customizable.

Terra Trade Reference Currency TRC "world currency" Bernard A. Lietaer Belgian economist proposed 1991 Basket of 9-12 most important commodities. Public issued demurrage fees for storage, shipping, handling

TOKENS REPRESENT REAL WORLD VALUE URN RESOURCES

ETHEREUM USES GAS GUAGE MEME INDICATING THRESHOLD MET / NOT MET

HBC's PRIMARY USE CASE IS TO ORGANIZE INDIVIDUALS IN TRADE FEDERATION GROUPS RE-USING BATTLEFIELD DIGITIZATION / ARIN Organizational Identifier Org_ID for Ecosphere friendly trade

Federation ("ORG_ID"} Gateway

ARIN American Registry for Internet Numbers

HYPER LEDGER OPEN SOURCE BLOCKCHAIN

Core APIs, & SDKs

Δδ Shared Ledger

Code execution environment, ledger data structures, modular consensus fwk & algos, and modular membership services, modular storage and event fwks, network peers

Alpha-Numerics

HEART BEACON CYCLE
TIME – SPACE METER
USPTO 13/573,002

METRICS
METERS

FEDERATION

Federation Gateway

("Organization ID")

RESTFUL SYNC DELTA
CHANGE MANAGEMENT
MICRO-MACRO CYCLE

BLOCKTIME ARBITRAGE

Code Guide

ROSETTA STONE

XBRL / CDL / DAML
STOCK MIC CODES

STRUCTURED
MILITARY MESSAGE
TEMPLATE FORMS
LOGIC / FILTERS

SYNTAX
SYMBOL LIBRARY

300 + MESSAGE TEMPLATES
USE CASES / GROUPED DATA TRANSACTIONS
Alpha-Numeric Data Element ID -- #'s are the UNIVERSAL LANGUAGE

MICRO-MACRO CYCLE SCHEDULE

FFIRNS
FFUDNS

HYPER LEDGER USES JSON ("tag"" / YAML Text indentation – UNIVERSAL LANGUAGE = ALPHA-NUMERICS

"All decentralized, blockchain-based networks are DAOs, or decentralized autonomous organizations" Bitcoinist

"A DAO can be summed up as an organization of people who communicate with each other via a "network protocol," which is to say that they communicate with one another via a ruleset"

LINK http://bitcoinist.net/how-dash-dao-work/

"all digital currency networks, the base layer of people generating th blockchain — "miners," "stakers,"
"witnesses," "validators," or "forgers" — all get paid to do so"
"consensus," or an agreement upon what the rules should be; and second, the execution of said rules.

"Its makeup is thus: the block reward is divvied up in three parts. The first 45 percent goes to Dash's miners. Another 45 percent goes to its Masternodes. And 10 percent is set aside to fund whatever other jobs or expenditures the Dash network deems necessary"

InstantX: To solve the problem of lag time in transactions, Masternodes are able to instantly lock transactions.

Masternodes receive payments for their service to the network

STOCHASTIC HARMONIZATION FIREFLY-HEARTBEAT EVENT BUS

HEART BEACON CYCLE = IMPROVEMENT TO NETWORK CENTRIC WARFARE

DAO: RAND THINK TANK TERM COINED + / - 2001

Firefly - Heartbeat synchronization: nodes in a distributed system generate periodic, local "heartbeat" events approximately at the same time with a goal of all nodes starting / ending cycles at the same time eventually = HB CYCLE

Δδ

STATE: stored data at a given instant in time

STATE CHANNELS: blockchain interactions which *could* occur on the blockchain, but instead get conducted *off* of the blockchain, without significantly increasing the risk of any participant.

1.Part of the blockchain state is locked via multisignature or smart contract conventon, so that a specific set of participants must completely agree with each oth update it.

2.Participants update the state amongst themselves by constructing and signing transactions that *could* be submitted to the blockchain, but instead are m h new update "trumps" previous up

3.Finally, **participants submit the state back to the blockchain**, which closes the state channe

NEW UPDATES OVERWRITE THE PREVIOUS: simplest way is to have any unlocking attempt start a timer, during which any *newer* update can replace the old update (restarting the timer). When the timer completes, the channel is closed and the state adjusted to reflect the last update received. The length of the timer would be chosen for each state channel, balancing the inconvenience of a long channel closing time with the increased safety it would provide against internet connection or blockchain problems. Alternatively, one could structure channel with a financial penalty so anyone publishing an inaccurate update to the blockchain will lose more than gain by pretending later

FLASH HEARTBEAT MESSAGES
HEARTBEAT STATE META-DATA
SNAPSHOTS EVERY
10, N MIN MICRO TO
MACRO ECON CYCLE

HASH TABLES

STATE SNAPS

Firefly - Heartbeat synchronization: nodes in a distributed system generate periodic, local "heartbeat" events approximately at the same time with a goal of all nodes starting / ending cycles at the same time eventually = HB CYCLE

TWAP Algorithm Manages Bitcoin Price Volatility Algorithm

TWAP GOAL: provide a Time Weighted Average Price Benchmark

FIREFLY HEARTBEAT ALGO

STAT MEAN VALUE INDEX

TWAP Works To gauge trading performance, many traders in different asset classes (equity, fixed income, currency) often use average price as a benchmark. The two common ways to calculate an average are a time-weighted average price (TWAP) and a volume-weighted average price (VWAP). TWAP is the average price of a bitcoin over the course of a specified period of time i.e., **Heart Beacon Cycle**

The algorithm trades over a desired time, either 1, 6, 12 or 24 hours and will give you a TWAP over that time period. For example, set the TWAP algorithm to sell 12 bitcoins over 12 hours, the algorithm will sell throughout the period, aiming to get a 12-hour TWAP

VWAP is price multiplied by number of bitcoins traded, then divided by the total number of bitcoins traded during a time period. The time-weighted average price algorithm is matched to closest HB

Firefly Heartbeat Sync nodes strive to sync in a distributed system. Nodes emit periodic "heartbeat" events at approximately the same time. There is no need to sync during a cycle as long as the cycle length is bounded & nodes eventually agree. HBC's improvement is stipulating a clock cycle value e.g., 5, 10, 15..

IBM / SAMSUNG ADEPT Autonomous Decentralized Peer-to-Peer Telemetry

https://scribd.com/doc/252917347/IBM-ADEPT-Practictioner-Perspective-Pre-Publication-Draft-7-Jan-2015

HBC PROCEDURAL TEMPLATE FRAMEWORK

/localhost/nfd/fib/add-nexthop

MACRO / MICRO CYCLES

PAYMENTS BASED ON GEO-SPATIAL TEMPORAL METRICS / METERS

<URN> DESCRIBES COMMODITIES ETC BY UNIFORM RESOURCE NAME BY </INTEREST>>

ASSET SHARING WITHIN FEDERATION

BUSINESS LOGIC = WORKFLOW <XML_Wf>

FILE SHARING = CYCLIC SYNC DELTA LEDGER / DOCUMENT REFRESH

OPEN SOURCE = HBC = PROTOCOL AGNOSTIC

DATA LAYER: STATE META DATA TIME STAMPED BY <UUID><ORG_ID><URN> & DATA PREPPED & "DATA WRANGLED PRIOR TO FUSION CENTER ENHANCED ANALYTICS / PROTECTS BANDWIDTH

ADEPT Standard Peer Architecture – Logical View

Block-Weighted-Average-Price (B-WAP) API creates a USD price for any block in the Bitcoin blockchain, based on BNC's Bitcoin Liquid Index (BLX). Automatically appropriates blockchain transactions with a USD price or technical indicator for traders.

Key Features:

Look up any bitcoin blockchain transaction and receive back a USD value for any transaction.

Built using historic bitcoin price index - the BNC BLX.

API updated every 10 min with a 2 hour delay on latest blocks (due to the nature of Block propagation to ensure avoidance of publishing rates on orphaned blocks).

All rates time-stamped in UTC.

Ability to look up by time-stamp.

Ability to look up by block-height.

Asset Classes: Digital Currencies

Get by: Block-height, Time-stamp or Transaction

Transaction ID, Block ID, time-stamp, BWAP per block, Value in USD. BTC per transaction, bitcoin transaction fees per transaction.

"Blocks are a measure of time":
The Bitcoin Blockchain 'B-WAP'

•Exchanges Covered: Price discovery for the B-WAP comes from utilizing the BNC Bitcoin Liquid Index (BLX) bitcoin price calculation.

•Historical Rates: This API goes back to 2010-07-17 23:14:35 UTC.

FIREFLY – HEARTBEAT ALGORITHM UNIVERSAL EVENT BUS

R3 CEV Corda shared ledger

UNIVERSAL EVENT BUS

- Choreographing workflow between firms without a central controller
- Supports inclusion of regulatory & supervisory observer nodes
- Validating transactions solely between parties to the transaction
- Supporting a variety of consensus mechanisms
- Recording explicit links between human-language legal prose documents and smart contract code

- PROOF OF WORK
- PROOF OF STAKE
- STATE CHANNELS
- BITCOIN NEXGEN
- LIGHTNING / DASH..

PROJECT LIGHTING

FIREFLY – HEARTBEAT ALGORITHM

FIREFLY – HEARTBEAT

EVENT REPORTING ACROSS TIME-SPACE

Δδ

MESSAGE EVENT BUS

SEGWIT

SEGREGATED WITNESS

SegWit

Δδ

ADJACENT FIELDS SEPARATE STATE CHANNELS

transactions sent over / off chain micropayment channels

Micropayment Channels

Setup: Alice creates transaction with 10 bitcoin to a 2-of-2 multisig with Bob

LIGHTNING

Millions of Transactions. Milliseconds of Delay.

CLOCK FACE 360'

90 / 90 / 90 / 90

BASEBALL "DIAMOND"

A diamond Is a square Is a block in 3D

Satoshi Nakamoto: "The solution we propose begins with a TIME STAMP SERVER

2nd Base

ALICE Corp VS CLS BANK SC 573 US 134 2347

CLAIMS MAY NOT DIRECT TOWARDS ABSTRACT IDEAS

Physical = Opposite of abstract = ALICE

HEART BEACON CYCLE

TIME – SPACE METER

USPTO 13/573,002

MACRO CYCLES

RULES / ROLES

INSTRUCTIONS

WORKFLOW

UMPIRE

COACH

90 feet

Blockchain / crypto currency increments

Blockchain BLOCK in 3D = CUBE

Cube has Length, Depth, Height, Volume

3rd Base

STATISTICIAN

Metrics, Meters

Stat Mean Value Index

{"URN"}

{"ORG_ID"}

{"URN"}

UNIVERSAL HEARTBEAT MESSAGE EVENT BUS

first base

RUNNER

Message Bus

3 X 5

HASH TABLES

STATE META

DATA SHARDS

90 feet

SETTLEMENTS / EXCHANGES = TAXABLE EVENTS AKIN TO PROPERTY

IRS

#1421

I.R.S.

90 feet

Firefly – Heartbeat Algo

Stochastic Harmonization

FIX {"108"}

FLASH MESSAGE EVENT BUS

EVENTS

Δδ

TIME STAMP SERVER

Epoch Time Cycles

State Meta

Data Snapshots

Survey Point

MICRO CYCLES

home plate

HASH TABLES

NONCE

SYNTAX / SYMBOL TAGS

Digital Signature

MESSAGES

OUT OF BAND / CHANNEL

Hashed TIME LOCK contracts component for global consensus

OP_CHECKLOCKTIMEVERIFY During Macro Cycle w/Random # BEACON

Δδ

Server nodes, miners only keep recent blocks

Payment channels multi-hop hub spoke model like internet routing

ADJACENT FIELDS SEPARATE CHANNELS

Δδ

Sync Delta

State Meta

Data Snaps

Segregated witness = Separated signatures

- signatures are cryptographic proofs also known as witnesses
  - moving signatures out of transactions
  - keeping a separate repository of the signatures
  - making them optional in propagation and storage
  - signature are the biggest part of transactions
  - can be implemented as a **soft-fork** vs a **hard-fork**

Electronic Product Code Information Services (EPCIS)

GS1 Standard for creating, sharing visibility event data

Core Business Vocabulary (CBV)

What identifiers of object(s) or entities / subject of the event
When date time when event took place, local time zone in effect
Where location identifier where event occurred, identifier of location where object(s) are expected to be following the event
Why Information about the business context, including:
a Identifier that indicates the business step taking place

MICRO CYCLES

CLOSER IS CHEAPER
CLOSER IS FASTER

Proximity Wireless Sensor Networks in Combination With RFID .. on reading tag in RF-field the router sends heartbeat message

RFID Configuration TCP/IP heartbeat message

STRUCTURED DATA EXCHANGE / STRUCTURED MILITARY MESSAGES

BIZ USE CASES SYNTAX LEXICON CODE GUIDE

ALPHA NUMERIC BREVITY CODES

BATTLEFIELD DIGITIATION
NETWORK CENTRIC WARFARE
SYTEM OF SYSTEMS
BEST PRACTICE

{"ORG_ID"}
{"URN"}
{"UUID"}

MESSAGE DATA SETS

TEMPLATES / FORMS

ROLES / RULES {"FILTERS"}

NETOPS SOP

How 'Bitbanks' Could Solve Bitcoin's Volatility Problem
MV=PQ Money x Velocity = Price x Quantity

MV=PQ

Internet of Everything
Every Where Value Index

The most important equation in monetary economics, the equation of exchange: MV=PQ. The quantity of money (M) times the rate spent (V for velocity) equals the price of everything bought (P) times the amount bought (Q for quantity). In Bitcoin, M Money is on a predetermined path, converging to 21m bitcoins. In relation to the other variables, Bitcoin is fixed. V, P, & Q fluctuate

Spatial Econometrics

MONEYBALL ECONOMICS

MACRO ECONOMIC CYCLES

M = MONEY BITCOINs FIXED
= FINITE # OF COINS 21 Million

X

V = VELOCITY = RATE SPENT
RATE COINs MINED % OVER TIME

=

P = PRICE of Everything Bought
TIME SERIES DATABASE Coin SUM

X

Q = QUANTITY
SUM / AGGREGATE

Coin / Currency Type Mediation Services

Land Survey
Triangulation
IDMaps / Sonar Hops

Holdings on Bitcoin Island:
Plots A, B, C represent 3 unspent transaction outputs controlling N Bitcoins.

RATE % MINED

Δδ

currencyindex

COMMODITIES

Statistical mean value index

NEWSCAST

Memo #1421: Purchased Bitcoins akin to land

I.R.S.

Memo 1421

Mined Bitcoins

Δδ

<ORG_ID>

Unmined Bitcoins

Δδ

AGGREGATOR

Firefly Event Bus

FIREFLY

FLASH MSGS

URN = Uniform Resource Name

<URN>
<URN>
<URN>
<URN>
<URN>
<URN>
<URN>
<URN>

Asset Class
Asset Type

BlockTime Arbitrage

Δ

Δδ

Commodities

TERRA TRC

Demurrage
Parking Fees

Match Events To Closest Heartbeat Cycle

time series

Time Series Dbase

SHARED COINS / SCHELLING MODEL

TERRA TRC COMMODITY BASKET

SCHELLING POINT AS "TRUTH"

Price Indexes in Time and Space

IDMaps

SonarHops

MICRO-CYCLES
MICRO - ECONOMICS

FIX {"108"}
Bitcoin Types

Firefly-Heartbeat Algorithm Events

NIST TIME BEACON

SchellingPoint

FUNGABILITY

$$$ PHYSICAL

$$$ DENARIUM

1 to 1 CONVERSION

BITCOIN's 6 ISSUES

CURRENCY CONVERTER

bitcoin

FEDCOIN / WORLDCOIN

STATISTICAL MEAN VALUE INDEX

FIX 108 FIX 108

FRIEDMAN's K % RULE

CURRENCY PULSE X % GDP @ Y MACRO Economic Cycle

Trade w Earth?

NOVUS ORDO SECLORUM

BITCOIN's VALUE IS TIME ITSELF

BLOCKTIME ARBITRAGE

IDENTITY

{"Org_ID"} {"Org_ID"}

Organizational ID

Organizational Unit OU

FINCEN > { "Org_ID" "} "OU" > WALLET 1, 2,3,4,5.. }

Multi-SIG e.g.., select TRIBAL COUNCIL MEMBERS

Federation Gateway

MEDIATION GATEWAY

MICROSOFT BLETCHLEY WORLD COMPUTER

Price Indexes in Time and Space

Statistical Mean VALUE INDEX

WAVES

$$$ $$$

TIME SERIES DATABASE

TERRA TRC

namecoin

¥EN

MONEYBALL ECONOMICS

currencyindex

COMMODITIES

VOLATILITY

MV = PQ

COMMODITY BASKET PRICE INDEX

STATISTICAL MEAN VALUE INDEX

Time Series Dbase

</DOMAIN>.COM {"DOMAIN"} MSFT.COM

NO INTRINSIC VALUE

EVENT BUS

ETH BaaS Ethereum Blockchain as a Service

Azure

cycle n | n + 1 | n + 2

Cloudcenter Cloudcenter

ETHEREUM

WORLD COMPUTER

Little League Baseball Tournament main embodiment

13,573,002 SC Alice Corp V CLS Bank

Multi-Meme

INCONSISTENT MEMES

- WORK / STAKE
- Property / Land
- POET TIME

Mined Bitcoins

Unmined Bitcoins

IRS Memo 1421

BLOCK

Roles Meters

Rules Metrics

Attribute Series

Time Series

Value

Time

Contract Definition Language

Digital Asset Modeling Language

Geo Spatial

Temporal Series

HEARTBEAT MESSAGES

On / Off Shore

Non-Repudiation

Cyber Beacon

{"INTEREST"}

{"DISTANCE"}

NIST TIME BEACON

Quantum Random Number Beacon

NIST Beacon

A Public Randomness Service

Non-Repudiation

BLOCKCHAIN SCALEABILITY

Hashed TIME LOCK contracts component for global consensus

OP_CHECKLOCKTIMEVERIFY During Macro Cycle w/Random # BEACON

LIGHTNING NETWORK

Sync Deltas

FIREFLY – HEARTBEAT

IDMaps

SonarHops

Payment channels multi-hop hub spoke model like internet routing

Server nodes, miners only keep recent blocks

Sync Delta State Meta Data Snaps

TIME-SPACE ALGORITHM

Stochastic Harmonization

Gamification is the use of game thinking and game mechanics in non-game contexts to engage users in solving problems. Gamification techniques strive to leverage people's natural desires for competition, achievement, status, self-expression, altruism, closure.

STRATML/ IODEF RID

<GLOBAL>
<JOINT>
<DOMAIN> <SHARED
<COMMUNITY>
<PRIVATE>

CLASSES

Time Series Dbase

Cooperate, Federate and Graduate

HOW GAMIFICATION WORKS:

5 COMMON MECHANICS

POINTS

Measure a user's achievements in relation to others

Can double as currency to exchange for rewards

BADGES

Reward achievements visually

LEVELS

Encourage users to progress and unlock new rewards

LEADERBOARDS

Organise players by rank

CHALLENGES

Encourage engagement by offering specific tasks to complete

4 MAIN WAYS TO DRIVE ENGAGEMENT

ACCELERATED FEEDBACK CYCLES

CLEAR GOALS AND RULES OF PLAY

A COMPELLING NARRATIVE

CHALLENGING BUT ACHIEVABLE TASKS

TESLA

BLOCKCHAIN MICROGRIDS

USPTO 13/573,002

IEEE C37.118 Time Synchronization
Harmonization Heartbeat update Interval
PMU data time-stamp measure C37.118

Phase 2: Shared file stores data for 5 tags:

(1) Active ID
(2) Heartbeat 1.
(3) Heartbeat 2.
(4) Device Status 1.
(5) Device Status 2.

Paul Revere = Linear, Sequential meme

Geo Spatial
Temporal Series
Water Drop Meme
Geospatial Radius

BLOCK TIME – SPACE ARBITRAGE TRADE
ENERGY TOKENS FOR FOOD, WATER,
TRANSPORTATION LOCALLY, REGIONALLY

WATER DROP
MEME= RADIUS
DISTANCE FROM
ENERGY SOURCE

Micro Payments
Demurrage Fees

TAG vector	ENERGY TOKENS ExDesc / COMMODITIES	digitalset
{"Org_ID"} ActiveID	[UFO2_ACTIVEID]	</EVENT>
IF1_Heartbeat (IF-Node1)	[UFO2_HEARTBEAT:#]	</EVENT>
IF2_Heartbeat (IF-Node2)	[UFO2_HEARTBEAT:#]	</EVENT>
{"UUID"} IF1_DeviceStatus (IF-Node1)	[UFO2_DEVICESTAT:#]	</EVENT>
{"UUID"} IF2_DeviceStatus (IF-Node2)	[UFO2_DEVICESTAT:#]	</EVENT>
IF1_State (IF-Node1) Δδ	[UFO2_STATE:#]	Δδ IF_State
IF2_State (IF-Node2) Δδ	[UFO2_STATE:#]	Δδ IF_State

IEC 61850 Objects logical nodes, data objects or data attributes resends message with the heartbeat cycle

SYNC
DELTA
HEART
BEAT
Match events to Closest HBC

Unilnt does not examine the remaining attributes, the point source and location must match

Micro Payments
Demurrage Fees

Heartbeat
State meta
Data snapshots

IEEE 802.1AG HOP BY HOP DETECTION
IEEE 802.11 HbH HOP BY HOP CONTROL

< HOPS = CHEAPER Sync Delta Heartbeat Messages

CROSS LEVEL OVERAGES / SHORTAGES ADJUST FOR TIME / DISTANCE BETWEEN NETWORK NODES

Micro Payments

FIREFLY-HEARTBEAT ALGO EVENT MESSAGE BUS

FIREFLY EVENT BUS

CLOSER = < Infrastructure
= CHEAPER SLA

ElectroMagnetic waveforms

The E and H fields are perpendicular to the direction of propagation

Hertzian waves transmit Energy in a PLANAR transverse EM waveform producing 'Radio waves'

In 1887, Heinrich Hertz demonstrated the reality of Maxwell's electromagnetic waves by experimentally generating radio waves in his laboratory

All Photons and EM waves can have various directions of polarisation with respect to their direction of propagation

Although they utilise the same EM energies, different EM waveforms can be produced where the Electric fields are in 90° opposition to each other thus leading to conflicting theories of EM wave propagation

"As in nature, all is ebb and tide, all is wave motion, so that in all branches of industry, alternating currents, electric wave motion will have sway." N. Tesla

Through longitudinal waves, Tesla transferred energy to receiving devices. He sent electrostatic forces through the air, transferred electrical energies and noted the lethal forces produced by these waves

Heinrich Hertz

(22 Feburary 1857 - January 1 1894)

INTERNET = 1. TIME EPOCH CYCLES 2. Syntax (not) Processed in cycle

Nikola Tesla

(10 July 1856 – 7 January 1943)

f

Cycles per Second

V

Volts per Second

Soon after Hertz's claim of discovering Maxwell's transverse EM waves Tesla visited him and personally demonstrated the experimental error to him. Hertz agreed with Tesla and had planned to withdraw his claim, but varying agendas intervened and set the stage for a major rift in the 'accepted' theories that soon became transformed into the fundamental "laws" of the electric sciences that have held sway in industry and the halls of academia to the present day

United States US 20120092107A1 (12)
Baptista De Alves Martins (43)
Pub. Date: Apr. 19, 2012

PROPULSION SYSTEM USING THE ANTIGRAVITY FORCE OF THE VACUUM

ENERGY PRODUCTION

ABSTRACT: A propulsion system for aerial, terrestrial, underwater or space propulsion, through manipulation (or engineering) of the vacuum with proper electromagnetic interactions. Vacuum manipulation.. new form of propulsion, and has applications in energy production and on change of time decay of radioactive elements. Opposing magnetic or electric fields create a mass repelling force, while attracting magnetic or electric fields create a mass attracting force. This vacuum manipulation process.. used to propel a mass that contains field sources that perturb the vacuum. .. the creation of a repulsion point in space through the interference of two or more longitudinal electro dynamic (micro) waves

Fig10 d

TESLA

IEEE C37.118 Time Synchronization
Harmonization Heartbeat update Interval
PMU data time-stamp measure C37.118

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THESIS: All things net, net of programmable $$$ are formed using:

1) Time epochs created by quartz crystal silicon chips

2) Syntax used / not used as programming instructions during epoch time cycles

ENERGY / DATA WAVE METRICS / METERS

BELL STATE QUANTUM COMPUTING

Quantum Computing Vibrations encode, process data like quantum computers. A simple mechanical system built from aluminum rods uses vibrations to encode information, mimicking quantum computing in a non-quantum system. "Light is made from photons, the quantum of light. mechanical vibrations or sound waves can be described in a quantum-mechanical manner i.e., composed of phonons: the smallest possible units of mechanical vibration" Link: https://phys.org/news/2018-06-quantum_1.html

"Nature may reach the same result in many ways. Like a wave in the physical world, in the infinite ocean of the medium which pervades all.. Nikola Tesla

TESLA

"When space-time spins, it creates mass. It produces energy in space that radiates. This radiation is what we call mass". Nassim Haramein

Nassim Haramein's work is geometrically based, at the fundamental level spacetime = honeycomb of overlapping spheres of energy each having a singularity at its center.

Harmonic Sphere Flux Resonator:

ENERGY / DATA

Yttrium iron garnet spheres serve as magnetically tunable filters and resonators for microwave frequencies. YIG filters are used for their high Q factors, typically between 100 and 200. Sphere made from a single crystal of synthetic yttrium iron garnet acts as a resonator. Wikipedia

YIG sphere placed in maximum magnetic field of a microwave cavity mode.

Fig 1 - Li Zheng

YIG sphere and the uniform external bias magnetic field.

YIG/graphene structures and the electrodes used to measure the dc voltage due to the IREE charge current in the graphene layer resulting from the spin currents generated by microwave FMR spin pumping.

Bloch Sphere

Time Series Data

Water Drop Meme

IEEE 802.1AG HOP BY HOP DETECTION
IEEE 802.11 HbH HOP BY HOP CONTROL

The creation of spinlogic devices, which allow the control and transport of the spin current over long distances, is one of the major research challenges in spintronics. In this regard, graphene-a single atomic layer of carbon atoms in a honeycomb lattice [see Fig. 1(c)]-has attracted great attention as a promising material for spin-based devices due to its exceptional electronic transport properties, excellent charge carrier mobility, quantum transport, long spin diffusion lengths, and spin relaxation times [42]

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(RADIO) WAVE FORMS BEGAT DIGITAL DATA

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USPTO 13/573,002
573 U.S. 134 SCt 2347
"Alice in Wonderland Ruling"

WATER DROP PHYSICAL NATURAL MEME USPTOb13/573,002

Fisher information flux flows are generated and stored in wave packets as they propagate. This temporal aspect is crucial for understanding how information builds up in a system over time

$\Delta\delta$

The Variance of...

the partial derivative w.r.t. ϑ of...

the log-likelihood function of ϑ given observed value of X

$\Delta\delta$

$$\mathcal{I}(\boldsymbol{\theta}) = Var\left(\frac{\partial}{\partial\boldsymbol{\theta}}\ell(\boldsymbol{\theta} \mid \boldsymbol{X})\right)$$

USPTO 13/573,002 Time – Space Meter

Metrics

Continuity equation for flow of Fisher information in wave scattering: Nature / ISF International Space Federation

An electromagnetic wave scattered at an object carries locally defined and conserved information about all of the object's constitutive parameters. Specifically, we introduce the density and flux of Fisher information for general types of wave fields and identify the corresponding sources and sinks of information through a fundamental continuity equation. our theoretical predictions involve a movable object embedded in a disordered environment by measuring the corresponding Fisher information flux at microwave frequencies. Our results improve the understanding of the generation, propagation of information supports tracking and designing the flow of information in complex system of systems environments.

EPOCH EPOCH EPOCH

$\Delta\delta$ Sync Deltas

FOUNDATION FOR NET, NET OF $$$, WEB 3

← cycle n → ← n + 1 → ← n + 2 →

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ENERGY / DATA WAVE METRICS / METERS

BELL STATE QUANTUM COMPUTING

STANDING ELECTRO- MAGNETIC WAVE

A standing electromagnetic wave does not propagate along the x-axis; instead, at every point on the x-axis the *E* and *B* fields simply oscillate.

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"Nature may reach the same result in many ways. Like a wave in the physical world, in the infinite ocean of the medium which pervades all.. Nikola Tesla

Water drop in pond meme https://www.spaceandmotion.com/

On Truth & Reality
The Wave Structure of Matter (WSM) in Space

Paul Revere Linear, sequential meme

And as I shall explain in Einstein's relativity, when we apply this one law, where the wave velocity changes the wavelength also has a corresponding change such that we can never observe this change. This relates to the Lorentz transformations, the negative solution of the Michelson Morley experiment, and why we always measure a constant velocity of light even when it changes, thus why we cannot measure our motion through absolute space.

With respect to time, physics was always telling us that time is caused by frequency (and fundamentally by motion as the wave motion of space), since time equals the inverse of frequency t=1/f.

From our wave equation we see that while the velocity and wavelength change, the frequency remains constant, giving rise to an absolute time in the universe. This was one central problem of Einstein's relativity, he changed time and maintained a constant velocity of light, when the opposite is true. (Yes, this one property of waves from this simple wave equation has caused us so much confusion!).

"What we observe as material bodies and forces are nothing But Shapes and variations in the structure of space" Schrodinger

Physical Reality: 1. One Substance. Space exists with properties of an elastic solid wave medium, propagating longitudinal waves in all directions, thus forming standing waves in all directions. When these standing waves are in-phase (coherent) around a central point then a spherical standing wave naturally forms - space vibrates in and out around the central point, which we call the particle. There are two opposite phase spherical standing waves, which create the electron and positron (matter and antimatter),

2. One Law. The velocity of the waves is proportional to the wave amplitude (bigger waves travel faster). Where these waves are coherent, forming spherical standing wave 'particles', the wave amplitude is higher, and the waves travel faster. This, as i shall explain, is the foundation of all matter interactions, the source of causal connection and absolute truth.

Why matter and energy are equivalent, since a wave is a flow of energy between two states of the wave medium Space - kinetic energy (vibratory motion of space) and potential energy (elastic deformation of a nearly rigid space). Why matter and antimatter annihilate, due to destructive wave interference. How matter and antimatter can be created from apparently 'empty' space. How science can exist, since the spherical in and out waves provide continuous two way communication between matter in space (empirical knowledge), and the waves behave in a necessary manner due to this one law (logical knowledge).

Wave velocity is the velocity of light, ~ 3 * 10^8 m/s, the wavelength is the Compton wavelength ~ 10^-12 m, and the frequency ~ 10^20 Hz. So in a pin head there are roughly a billion billion billion standing waves, each vibrating a billion trillion times a second. i.e. These standing waves are very small, and vibrate very fast, thus explaining how such complex standing wave structures (like us) can evolve in space. The fundamental equation of the universe is the simple wave equation; Velocity (C) = Frequency (f) * Wavelength (y)

Combined with the equation of the sphere (which is also Pythagoras' Theorem and the metric equation of Special Relativity), and explains the geometric foundations of reality, why space is three dimensional. x^2 + y^2 + z^2 = r^2

"Simplicity is the ultimate sophistication".
(Leonardo da Vinci)

ACOUSTIC PHONON

USPTO 13/573,002

in-phase motion of neighboring ions in a lattice vibration

"nodes eventually agree" stochastic harmonization temporal sync

Phonons: A phonon is a quantum of the lattice vibration, the collective motion of atoms constituting a crystal. There are two types of phonons: optical and acoustic. The optical phonon has high-frequency oscillation in the THz range and the unit cell center of mass does not move. It undergoes a dipole interaction with light. The acoustic phonon propagates at sound velocity, which is the first derivative of the phonon dispersion curve at the Γ-point (wave vector k ≈ 0) in the first Brillouin zone. A simple example is a one-dimensional diatomic chain, in which the unit cell contains two atoms. In a crystal of N unit cells, there are 2N atoms and 2N degrees of freedom of motion. The displacement of an atom from its equilibrium position is expressed using plane waves with reduced wave vectors, defined within the first Brillouin zone. The oscillations are approximated by 2N harmonic oscillators of different wave vectors.
The vibrational frequency is related to the wave vector through the phonon dispersion relation. Phonons are created and annihilated in the harmonic oscillators. SOURCE: SCIENCE DIRECT: https://sciencedirect.com/topics/engineering/acoustic-phonon

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SOUND WAVES enable Different types of quantum tech to "talk"

Google's Quantum Qubit chip
VS
Qbert pondering qubits
Q*bert
VS THE QUANTUM QUBIT
QUANTUM ABSTRACTION
ABSTRACT VS NATURE:
573 U.S. 134 SCt 2347
"BITCOIN's VALUE = TIME ITSELF"
"TIME IS SPECIFIED IN UNITS OF BLOCK TRANSACTION CONFIRMATION TIMES"
Eric Trump: "Bitcoin to 1 MILLION"
VS QUANTUM SUPREMACY
STRATEGIC RESERVE
"THE Donald"
USDe
FISHER INFORMATION FLUX FLOWS
ACOUSTIC PHONON
in-phase motion of neighboring ions in a lattice vibration
TRUMP Quantum SPEED BUMP ???
GENESIS BLOCK
GENESIS EPOCH
SOUND / LIGHT e.g., Q.R.N.B. QUANTUM COMPUTING @ ROOM TEMPERATURE
SOUND WAVES = INTEROP
UTC SYNC
SYNC DELTA
Data Snapshots
TIMESTAMP SERVER
TIME CHAIN
SOUND WAVES enable Different types of quantum tech to "talk"
BITCOIN TRANSACTION AKIN TO LAND
ORG_ID in CLEAR / Person ID encrypted
'wave-particle duality is simply the quantum 'uncertainty principle'
ISO 20022
TIME EPOCHS & SYNTAX = FOUNDATION TECH
USPTO 13/573,002 The Heart Beacon Cycle Time – Space Meter / Adaptive Template
EPOCH
EPOCH
EPOCH
NET OF $ formed by 1) Time Cycles 2) Syntax
cycle n
n + 1
n + 2
Net of $$$ formed with:
1 EPOCH TIME CYCLES
2 {"Syntax"} "The Word"
"In the Beginning" Genesis Block
Google's Quantum Chip Willow
"Is Bitcoin at Risk"?
Quantum Supremacy
QUANTUM COMPUTING EPOCH HEARTBEAT
consensys
</START> {"/STOP"} {"TTL"
How Will Quantum Supremacy Affect Blockchain?
"All things internet, Internet of money are formed using time epoch cycles to process, parse, syntax as instructions"
"A blockchain is a consensus-based system. It only works if all nodes reach an identical state"

USPTO 13/573,002
sawconcepts.com/index

Heart Beacon Cycle Time – Space Meter
Geo-Spatial Temporal Intensity Metrics

Quadrature amplitude modulation

QAM by setting a suitable constellation size, limited only by the noise level and linearity of the communications channel

IDMaps assists Network Time Protocol (NTP) servers establish long term peering relationships

"Similarly, the electromagnetic force will also be found to vary continuously and retain a TIME-AVERAGED value"

Figure U-1.

FIREFLY – INSPIRED HEARTBEAT SYNCHRONIZATION ALGORITHM

"LENGTH OF REAL TIME CYCLE IS ARBITRARY AS LONG AS NODES EVENTUALLY AGREE"

Sine wave of our blinking universe. The 4 fundamental forces will all be found to vary continuously when sampled at 2x the blinking frequency, per Nyquist-Shannon theory

TRUTHCOIN Nullius in Verba: "On the word of no one"

Three ideas combined

HOW TRUTHCOIN WORKS:

1) Tradable Reputation

- **Abstract Corp exists to prove consistency within / across TIME**
- **Collects $ to power the mechanism.**

2) SVD Cross-Validation

- **Statistical technique: seeks importance.**
- **Gleans truth, measures conformity.**

3) Strategic Use of TIME

- **Funds can be 'locked' across time.**
- **Yet info-search-costs constantly fall.**
- **Net effect: time penalizes attackers only.**

Finance Thing	Interpretation	EVENT DERIVATIVE CORP = <Org_ID_1,2,3>
Bond (Debt)	"I, Paul Sztorc, owe $20 to whoever is holding this bond certificate on 03/02/2015."	
Stock (Equity)	"I, the CEO of SztorcCorp, owe 1/100th of SztorcCorp's profits to whoever is holding this stock certificate on 03/02/2015."	
Binary Call Option	"I, Paul Sztorc, owe $20 to whoever is holding this Option on 03/02/2015, **only if** the stock price of SztorcCorp is above 40 $/share on that date."	
...(others)...	...(others)...	
Event Derivative	"I, Paul Sztorc, owe $20 to whoever is holding this derivative on 12/01/2016, **only if** Hillary Clinton is elected US President in 2016. Otherwise I owe $0."	
...(others)...	...(others)...	

2. A kind of 'Future Wikipedia'

	Wikipedia	Truthcoin
Focus	Outcomes of **past events**. Consensus on **known facts**.	Outcomes of ***future*** **events**. ***Future*** **consensus** on *knowable* facts

3. A software protocol

A protocol is a set of rules that determine how something is performed or accomplished

Protocol (Decentralized)	Centralized Non-Protocol
Spoken English	Shakespeare's Globe Theatre, The Library of Alexandria, MLA Citation Format, Walt Whitman, J.K. Rowling.
Rules to American Football	The NFL, ESPN, The Buffalo Bills.
Bluetooth	A Set of Stereo Speakers, The iPhone 6, A Car Radio Equipped with Bluetooth
Bitcoin	VISA, PayPal, SWIFT, Western Union, Airline Miles, Amazon Coins, e-Gold, Liberty Reserve.

NIST RANDOMNESS BEACON: broadcast full-entropy bit-strings in blocks of 512 bits every 60 seconds. Each value is time-stamped, signed, & includes hash of previous value to chain sequence of values together. This prevents all, even the source, from retroactively changing an output packet without being detected. The beacon keeps all output packets and makes them available online. 1st, Beacon-generated numbers cannot be predicted before they are published. 2nd, public, Beacon's time-bound, authenticated nature of the Beacon proves true random numbers not known before a certain point in time. 3rd, this proof can be presented offline at any point in the future

NON REPUDIATION

NIST QUANTUM ENCRYPTION RANDOMIZATION BEACON

UNPREDICTABLE SAMPLING
SECURE AUTHENTICATION
SECURE MULTI PARTY / AUTHENTICATION

USPTO 13,573,002 Heart Beacon Cycle Geo-spatial, temporal Intensity Metrics and Time - Space Meter uses PHYSICAL Memes / Metaphors

NDN
</Interest>
</Distance>

SURVEY METHODs
+ TRIANGULATION
Euclidian Geometry

Geodesic System Routing Info Base RIB
ACCOUNT BELONGS TO </Org_ID>
RESOURCE TYPE: <URN><URN><URN>
DEVICE / SENSORS <UUID><UUID>
Higher-level services collect distance data to build virtual distance map of Internet & estimates distance between any IP address pair

State Snap Shots

The current standard time common throughout the world is based on a 24-hour clock, with zones that are are either 12 hours ahead or behind **Coordinated Universal Time (UTC)**. However, these time zones are decided upon by individual governments, without overall coordination and can even extend fourteen hours ahead UTC.

Stochastic Harmonization

Firefly-Heartbeat Algorithm
UNIVERSAL TIME ZONE SYNC UTZ
Sync Events to Closest HBC

The proposed **Universal Timezone System** would do away with all these differ-

NON-REPUDIATION

"Towards the perfect coin flip"
NIST Randomness Beacon

https://hackaday.com/2014/12/19/nist-randomness-beacon/

UNPREDICTABLE SAMPLING

SECURE MULTI PARTY Authentication

NIST Interoperable Randomness Beacon

Figure 2. Illustration of the generation of the ith pulse by a Beacon App (2.0)

The NIST Randomness Beacon Broadcasts a randomness pulse every 60 seconds Each pulse commits to a fresh 512-bit random string Each pulse is time-stamped and signed. Beacon periodically outputs a pulse containing 512 fresh random bits, time-stamped, signed and hash-chained. For example, each pulse also pre-commits to the randomness to be released in the next pulse. The latter enables users to securely combine randomness from different beacons. The Beacon protocol also specifies the interface for users to interact with the Beacon, in order to obtain information about past pulses.

A randomness beacon produces timed outputs of fresh public randomness. Each output, called a pulse, includes metadata / cryptographic elements

The main goal of the NIST Random # Beacon is to serve as a baseline for deployment of many interoperable beacons

ALL THINGS NET FORMED WITH:
1) EPOCH TIME CYCLES
2) SYNTAX / Opscode Brevity codes

Building Blocks:
Programmable
Economy / $$$

NIST Quantum Random Number Beacon

Quantum Random # Beacon

Firefly - Heartbeat Sync Algorithm
Heartbeat Event Message Bus
UTZ stochastic harmonization

"The external environment could update resources at random…
One solution is a heartbeat: defining a default lease duration delaying updates until the next cycle"

QUANTUM RANDOM # BEACON

NIST TIME BEACON

Metrics / Meters

Epoch Time Cycles
E0 E1 E2 E3…
Genesis Epoch E0
E1
E2
E…n

QubitCoin Interval: Every 30 Seconds

The current standard time common throughout the world is based on a 24-hour clock, with zones that are are either 12 hours ahead or behind **Coordinated Universal Time (UTC)**. However, these time zones are decided upon by individual governments, without overall coordination and can even extend fourteen hours ahead UTC. INCENTIVIZE ECO – FRIENDLY TRANSACTIONS

ENVIRONMENT FRIENDLY ECO INCENTIVES
Neural Net
Proximity Beacons
CLOSER = LESS FUEL
CLOSER = FASTER
BLOCKTIME ARBITRAGE
G7 Carbon
vector
ON
OFF
SHORE
{"INTEREST"}
{"DISTANCE"}
Named Data Networking NDN
STOCHASTIC HARMONIZATION
STAT MEAN
VALUE INDEX
Sync To Closest
Unused Resources
CO_2 Credits
Unmet Needs
Int'l Date Line
FIREFLY HEARTBEAT ALGORITHM
HEARTBEAT EPOCH
FIREFLY EVENT BUS FLASH
HEARTBEAT {108"} MESSAGES
Multi Meme Meter
IDMaps
SonarHops
STATE META DATA SNAPSHOTS

The proposed **Universal Timezone System** would do away with all these different time zones. Instead, it would be the same time all over the world, all the time.

Structured Data Exchange

Double-Slit Experiment

QUANTUM COMPUTING

- RESISTANT ? - BASED ?

THROUGH LENS OF SCOTUS

ALICE LOOKING GLASS RULING

USPTO APPLICATION 13/573 002

The Heart Beacon Cycle Time-Space Meter

Main Embodiment: Baseball Diamond = block in 3D = cube

SCOTUS ALICE RULING: "Claims may not direct towards abstract ideas" / Physical = opposite of abstract

The Hopf Fibration

Edmund Harriss

FIGURE 2.11.1. The Hopf fibration

BLOCH SPHERE

Quantum Physics

Quantum physics says that as you go deeper and deeper into the workings of the atom, you see that there is nothing there – just energy waves. It says an atom is actually an invisible force field, a kind of miniature tornado, which emits waves of electrical energy.

Hopf Fibration / #Bloch sphere

"the most important object in the universe"

"Hopf fiber bundles pop up in 8 quantum physics situations"... USPTO 13/573,002 water drop in pond meme / scalar wave in 2D - 3D

Paul Revere linear - sequential hop count meme

The Bloch sphere provides a useful means of visualizing the state of a single qubit & operations on it. Any point on this sphere represents a linear combination of the 0 and 1 states with complex coefficients.

A π/2-pulse 'rotates' a qubit from the 0-state to a superposition state.

UNITED STATES
PATENT AND TRADEMARK OFFICE

uspto

PAIR

RULING: "claims may not direct towards abstract ideas"

USPTO SCREEN CAPTURES SUSPENDED PAIR RULES

- Moved Examination <u>outside PAIR</u>
- Admin forms, fees, amendments.. MUTED
- NO Time Stamps = TEMPORAL AMBIGUITY
- Screen captures before / after filing

Screen Capture Software

TCP/IP
"Heartbeat"

UNITED STATES PATENT AND TRADEMARK OFFICE

uspto

Cape Hatteras Light House Completed 1870

Patent Worthy

Idea Formed CIRCA 2006

USPTO citation directs to SAW Concepts LLC's web pages suspending regular, formal process, content, format rules

LITTLE LEAGUE BASEBALL TOURNAMENT EMBODIMENT

13,573,002
October 16, 2014
Revived

LETTER USPTO
Office Action
Nov 6th 2015

National Association of Baseball Players Formed 1870

1. Transco V Performance

START

citation screen capture
web images not time stamped

METHOD / PROCESS / PROCEDURE TO ENABLE:
THE HEART BEACON RAINBOW FORCE TRACKING

STOP

12/856,715 Aug. 16, 2010

2

Screen Captures with No Time Stamps mailed by USPTO

10/709,358 April 29, 2004
METHOD TO ENABLE HEARTBEAT 911

2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015

11/601,035 Nov. 17, 2006 METHOD TO ENABLE THE HEARTBEAT BEACON FOR HOMELAND SECURITY AND HOMELAND DEFENSE INTEROPERABILITY

13/573,002 Heart Beacon Cycle
Aug. 13, 2012

10/605,144 Sep. 11 , 2003
Method to commercialize structured military messaging

USPTO screen capture circa 2006 sent to applicant without date time stamps thus suspending regular patent procedures, formatting etc. for an Indefinite period. Screen capture established that a patent worthy idea was formed. Many use cases i.e., stock, currency, commodities may be theme variants.

Stare decisis et non quieta movere

A court may Not reverse itself

300 + structured military message templates form syntax library, lexicon. Reuse of parsing, processing procedures logic establishes syntax consensus among a distributed system of systems

10/709,358 continuation further established all things related to the internet are formed using time cycles to parse, process syntax as instructions.

13/573,002 Baseball theme main embodiment addresses "221 errors" using real world, physical world concrete terms as compared to internet metaphors, memes such as packets, frames, Bitcoin, Blockchain, hops, "HEARTBEAT" pings that are abstract, abstractions. 13,573,002 is compliant with Alice Corp V CLS Bank ruling.

2 USA Supreme Court June 19, 2014
ALICE CORPORATION PTY. LTD. v. CLS BANK INTERNATIONAL ET AL.
claims ineligible for patent protection under 35 U. S. C. §101 "claims may not be directed to an abstract idea"

10/708,000 Jan. 30, 2004 continuation of 10/605,144
Method to enable a Homeland Security "Heartbeat"
Parenthesis around term "heartbeat" describes Internet TCP/IP metaphor as an abstraction. "Heartbeat" describes time cycles, intervals, periods created by a Central Processing Unit. Time intervals are used to parse, process or not process syntax as instructions thus forming the basis of all things, artifacts internet related. This patent worthy idea forms the main embodiment upon which all other embodiments and claims are based. All filings, embodiments, claims after this point in time related to 10/708,000 do not constitute new material or new claims as variations on main embodiment

USPTO APPLICATION 13/573 002

The Heart Beacon Cycle Time-Space Meter

Main Embodiment: Baseball Diamond = block in 3D = cube

1 + 3 +5 + 7 + 3 + 2 = 21 21 squared = 441

"We can synchronize ourselves in time for a common purpose" Universal Blockchain Meme 72 Diamond Shoals

Satoshi Bitcoin Blockchain
Time Stamp Server

THE SOLUTION WE PROPOSE
BEGINS WITH A
TIME STAMP SERVER

"In the beginning (of time) there was the word"

The K-Percent Rule was a proposal by economist Milton Friedman that the central bank should increase the money supply by a constant percentage every year.

The K-Percent Rule: sets the money supply growth at a rate equal to the growth of gross domestic product (GDP) yearly.

Milton Friedman

- 1912-2006
- Economist, monetarist
- 1946-1977: University of Chicago
- 1977-2006: Hoover Institution
- Essays in Positive Economics, A Theory of Consumption Function, Capitalism and Freedom, A Monetary History of the United States (1867-1960) - with Anna Schwartz, Free to Choose, etc.
- Nobel Prize in Economics, 1976
- Considered as conservative, in reality liberal economist
- Advisor to President Nixon

The Age of Aquarius: Aquarius, Aquarius Rising @ 6:44 A.M. Feb 10th 1960

Buckminster Fuller "build a new model that makes the old model obsolete"

Socrates: focus all your energy on building the new, not fighting the old"

#algorithmic #stablecoin #buckminster #fuller #cryptocurrency #Milton #Friedman

Maxwell's four 4 equations + the Lorentz force law = foundation of electro-magnetism

METATRON'S CUBE

GENESIS OF ALL FORM

USPTO 13/573,002 The Heart Beacon Cycle Time – Space Meter / Adaptive Template

UNIVERSAL LAW
CAUSE / EFFECT
ACTION /
INACTION
IF / Then /
or.. ELSE

STRUCTURED DATA – SYMBOLS AI

SYNTAX LEXICON
SPACE – TIME Metrics

R. Buckminster Fuller
Utopia or Oblivion:
the Prospects for Humanity
A challenging blueprint for the future by the world-renowned revolutionary thinker and inventor
World (Peace) Game 1961 simulation by Buckminster to help create solutions to overpopulation, the uneven distribution of global resources.

The World Game Annex K Signals & Telemetry
r. buckminster fuller
operating manual
for
spaceship earth

Spatial
TOKEN ECONOMICS
Econometrics
EVENT / ALERT BUS
MONEYBALL
ECONOMICS

What does your name mean?
Steven + Mcgee
Intellectual
Revolutionary
You have a sharp spirit paired with a strong will. You have the power to change the world with your intelligence!
Feb 10, 1960 Aquarius / Aquarius Rising

Alice Corp. v. CLS Bank International
573 U.S. 134
S. Ct. 2347
2014
"Claims may not direct towards abstract ideas"
Bloomberg Law:
Crypto Lawsuit Deluge
Has Big Firms Scrambling to Keep Up

National Park Service
Cape Hatteras National Seashore
"Send forth its cheering ray to the storm beaten mariner..."
– Federal Officer, Aug. 1861
Ticket Number 097 72

LIL' SLUGGERS FIELD
Dreams

11/12/2015

Yod Pattern
Quincunx - 150 deg
150 deg - Quincunx
sextile - 60 deg

The Time Keeper
Borderlands 4
MYSTIC YOD

BOOK OF THE CUBE
COSMIC HISTORY CHRONICLES
The Synchronotron 441 (21 x 21) cube matrix system represents the minimum fractal of totality cubed: 21 x 21 being the prime statement of totality (20) + 1 (unity). 1 + 2 + 3 + 4 + 5 + 6 = 21 (unity of totality). The Law of Time .org
Satoshi Nakamoto Reveal #2
"As an avid lover of numerology and astrology, I use both in my day-to-day life.
I believe God is the ultimate mathematician, as everything around us can be viewed as numbers"
Satoshi Nakamoto White Paper 2008 "The solution we propose begins with a time – stamp server"

BASEBALL "DIAMOND"
A diamond is a square is a block in 3D
Blockchain BLOCK in 3D = CUBE
Cube has Length, Depth, Height, Volume
INFOCON
5 4 3 2 1
INFORMATION CONDITION

TIME MERCHANT
WELCOME BACK
=WORLD HEADQUARTERS=

TIME MERCHANT
WELCOME BACK
=WORLD HEADQUARTERS=
Wayward Son

The Great Pyramid's slope angles match the angles necessary to perceive a rainbow
42°
51.84°

GENESIS OF ALL FORM
THE CUBE
SEED OF LIFE

19.47 degrees
0 degrees
19.47 degrees

Revelation 1:1 = 18,865
The Revelation of Jesus Christ, which God gave unto him, to show unto his servants things which must shortly come to pass; and he sent and signified it by his angel unto his servant John.
T-10 x 7³ = 18,865
7 x 7 x 7
37x73.com
The light shineth in the darkness
John 1:5
Perimeter = 3 x 3 x 3 x 7 x 7 x 7
9261
I AM³
אהיה
I AM
אהיה
21³
9261
21 x 21 x 21
3773
3773
3773
3773
+3773
18,865

The Cube of Creation - Called Truth
The Abyss
Outside of Truth there is Nothing and No One
Everyone who is of the Truth hears My voice

Cube Remix
Leftoverture

START

USER {"Org_ID"} ENVIRONMENT INFORMATION ASSET

{"URN"}

✔Subject attributes {"108"} ✔Environment attributes ✔Resource and action attributes

• • • TTL • • • • • • {"URN"}

Time To Live

Threshold

State Snapshots

RULE

RULES ENGINE

Permit managers to • • •
provided that • • •
if • • • or • • •
unless • • •

PERMIT

DENY

STOP

Lord Business

SIMPLE ALWAYS WINS… WHEN STANDING ON THE SHOULDERS OF GIANTS

IDMaps

SonarHops

Distance Est

SLA/O

INFOCON

5 4 3 2 1

INFORMATION CONDITION

Eco Incentives

UNIVERSAL Metrics / Meme

ONE EARTH

ONE PEOPLE

ONE TIME

Closer = Cheaper < Fuel

EARTHDAY EVERYDAY ON THE BITCOIN BLOCKCHAIN

TERRA TRC

Block Time Arbitrage

Spatial Econometrics

BFI

THE WORLD GAME ANNEX

EVENT / ALERT BUS

SIGNALS & TELEMETRY

r. buckminster fuller

"Build a new model operating manual for spaceship earth"

MONEYBALL ECONOMICS

UTZ

SYNC

Earth Intelligence Network

EIN

{"URN"}

{"Org_ID"}

TRC

TERRA

RETHINKING MONEY

Bernard Lietaer and Jacqui Dunne

TIME

FRIEDMAN'S K% RULE

currencyindex

Real World Assets

COMMODITIES

INFOCON

5 4 3 2 1

INFORMATION CONDITION

Heartbeat Flash Message Event Bus

STAT MEAN INDEX

Firefly Heartbeat Sync Algorithm Stochastic Harmonization

Sync to Closest Heartbeat

STATE META DATA Snapshot SYNC DELTAS

EVENT BUS

Commodity Token Index World Coin

Adaptive Procedural Template

USPTO 13/573,002 / SCOTUS Alice

300+ structured data templates

Spatial-Temporal Metrics / Meter

Syntax Lexicon Rosetta Stone opscodes

DAO Trade Federation Check List

Cell: 732-768-5440

ecoeconomicepochs@protonmail.com

Github: http://github.com/Beacon-Heart

Web3 IPFS: https://ecoeconomicepochs.dao

CHECK LIST

Eco Incentives: Closer = cheaper < fuel < C02

ECO-ECONOMETRIC HEARTBEAT

Earth Day Every Day on Bitcoin Blockchain

K % RULE

{"108"}

FEDCOIN / WORLDCOIN

STATISTICAL MEAN VALUE INDEX

HOW TO CHANGE THE WORLD

Swords to Plowshares

NATO / OTAN

Structured Data Exchange

300 + Message Sets

Mapped to Symbols

Symbol Sets

A.I

Artificial Intelligence

Man – Machine Interface

SYMBOLS RULE THE WORLD

SYMBOL LOGISTICS

Semantic blockchain

"Amazing Grace"

Rosetta Stone

Syntax Lexicon OPSCODES Brevity Codes