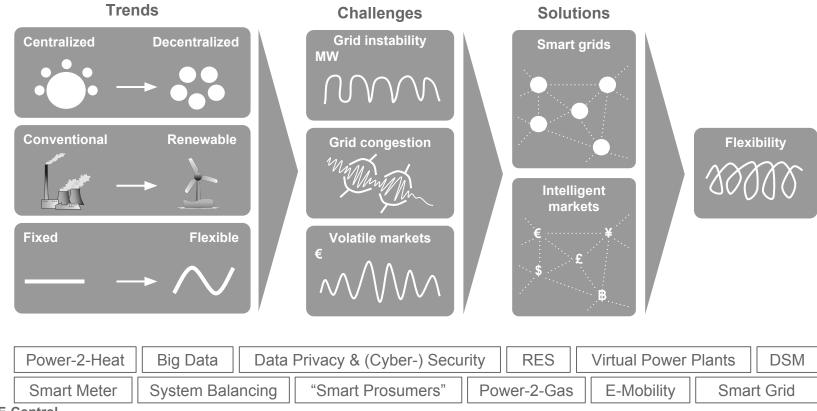
# WORLDMETER.IO AS INTERNET OF THINGS CONCEPT FOR ENERGY DATA INTEROPERABILITY

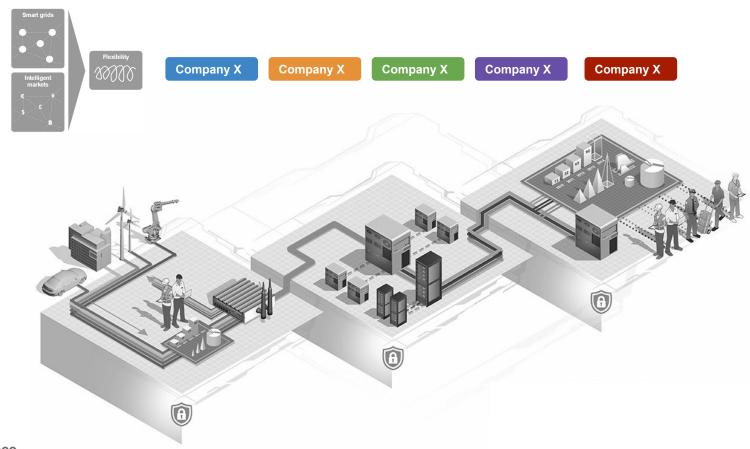
**Ewald Hesse Grid Singularity GmbH** 

14. Symposium Energieinnovation 2016 Graz

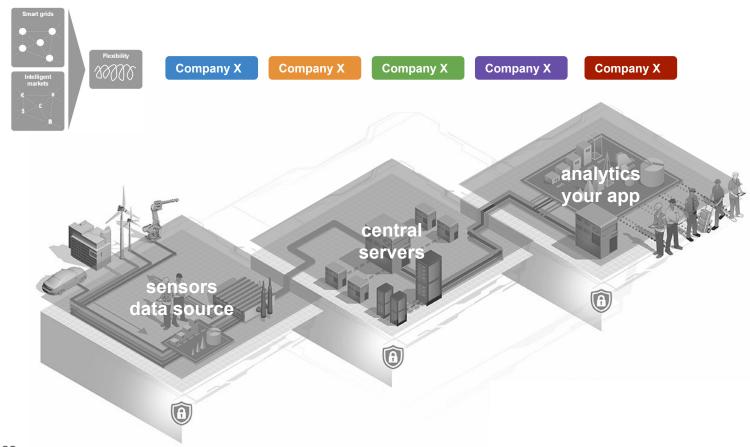
#### **Energy Market Development**



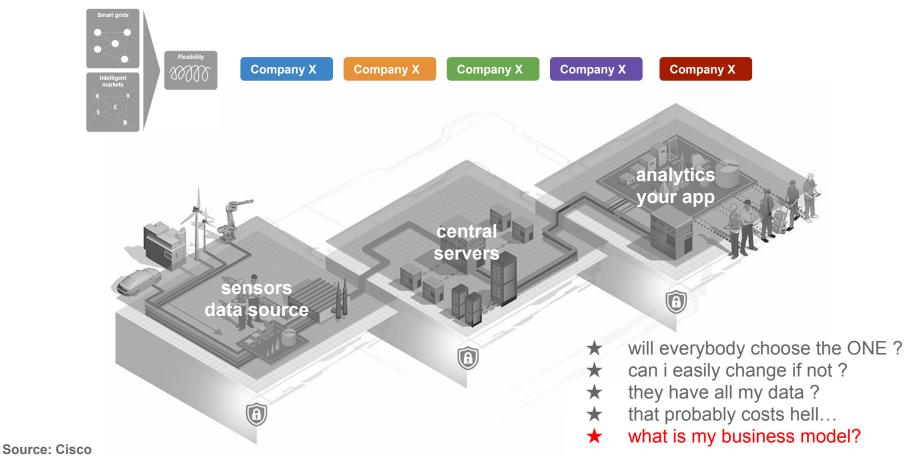
Source: E-Control

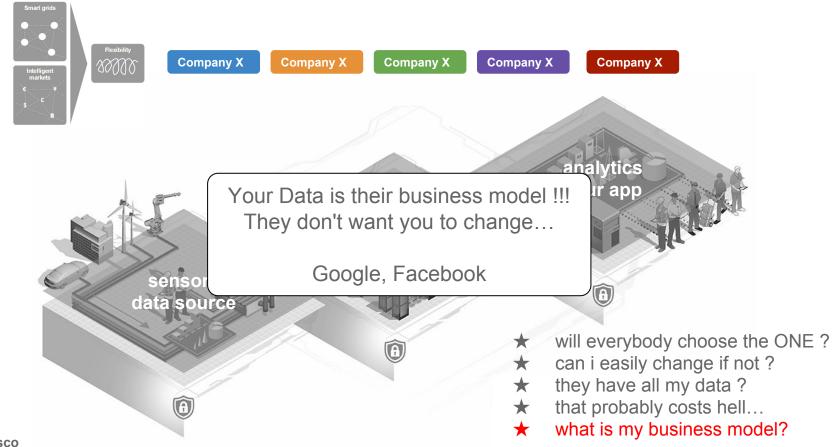


Source: Cisco



Source: Cisco





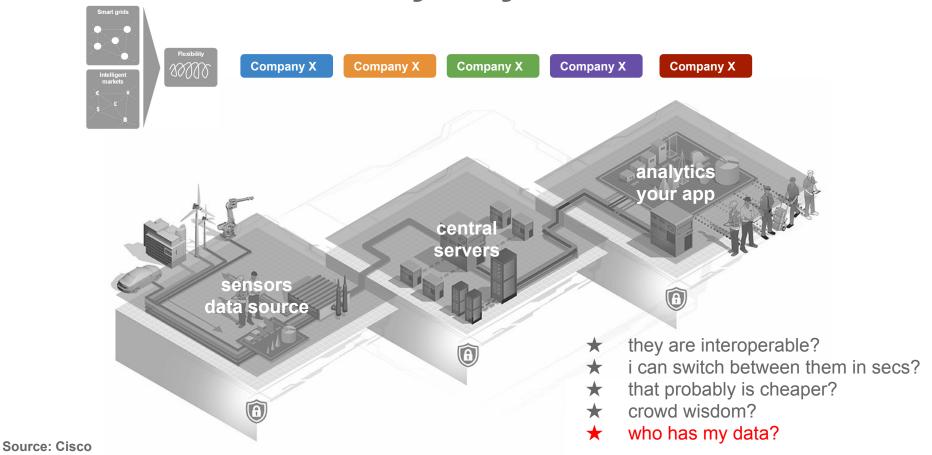
Source: Cisco

#### Choose as many as you want! (no change cost)



Source: Cisco

#### Choose as many as you want! (no change cost)



# Blockchain

Jetzt online - Miners



Startseite

Charts

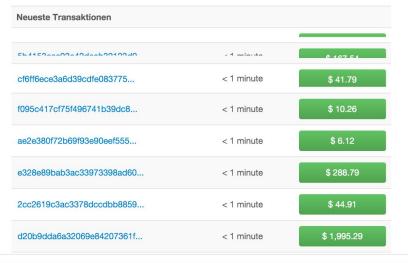
Statistiken

**Startseite** Die aktuell gefundenen Blöcke in der Bitcoin Blockchain

Mehr ...

Deutsch -

Höhe	Alter	Transaktionen	Insgesamt gesendet	Weitergeleitet von	Größe (kB)
398019	1 hour 20 minutes	1812	\$ 11,502,020.10	F2Pool	887
398003	3 hours 26 minutes	673	\$ 6,845,192.75	BitFury	350
398002	3 hours 30 minutes	390	\$ 5,062,147.92	BitFury	219
398001	3 hours 31 minutes	1330	\$ 9,226,405.44	AntPool	912
397996	4 hours 37 minutes	1285	\$ 9,573,986.34	F2Pool	581
397976	6 hours 47 minutes	659	\$ 1,269,891.34	BitFury	551



#### Suchen

Hier können Sie nach Blockhöhe, Adresse, Blockhash, Transaktions-Hash, hash160 oder IPv4-Adresse suchen.

Adresse / Firstbits / IP / SHA-Hash Search

NEWS

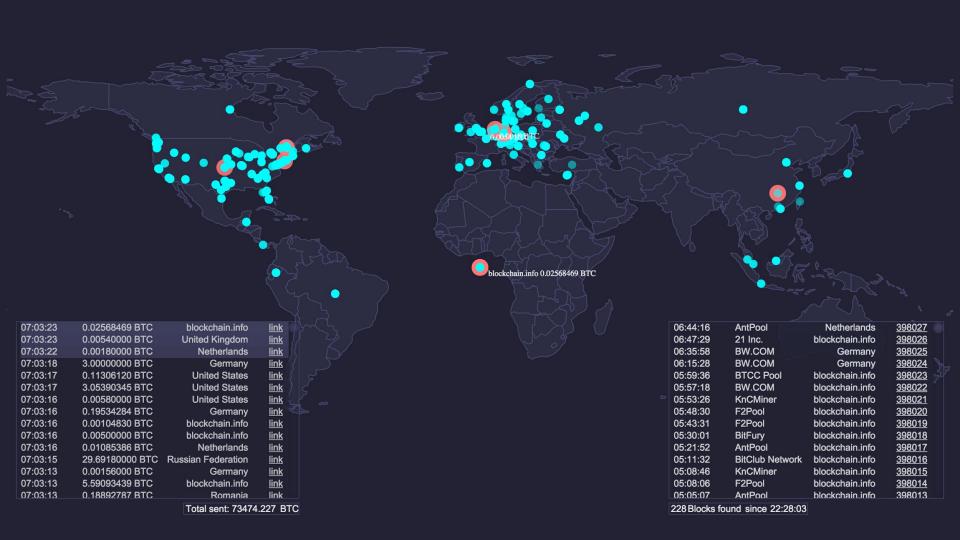
Magnr - Bitcoin Trading Platform | Trade with Leverage

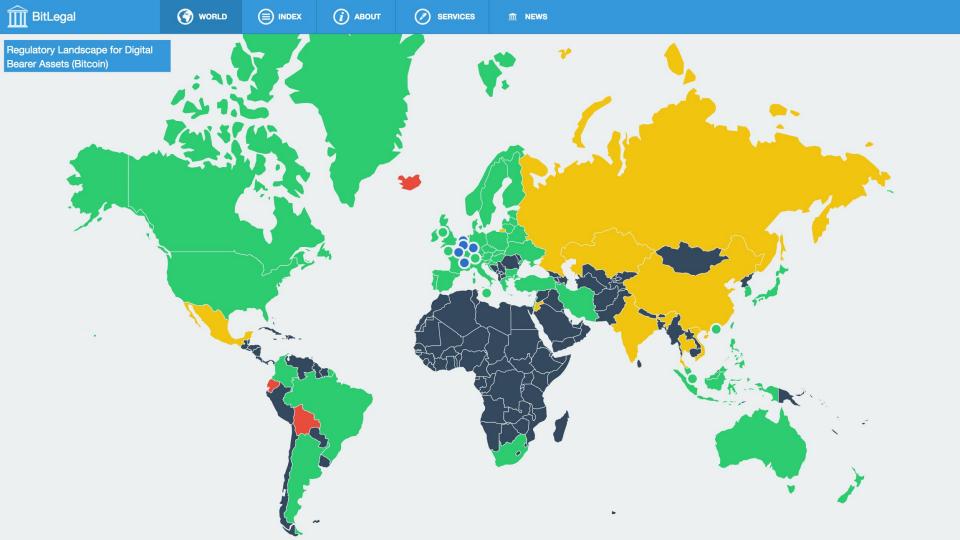
Magnr ← 1 minute vor WTF. Coinbase. Fix this now.

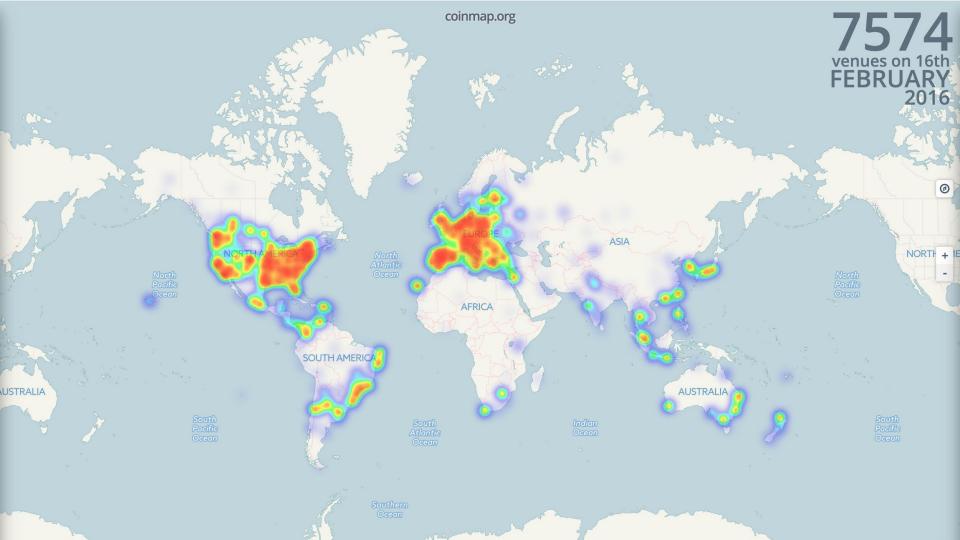
Bitcoin stealing malware evolves again

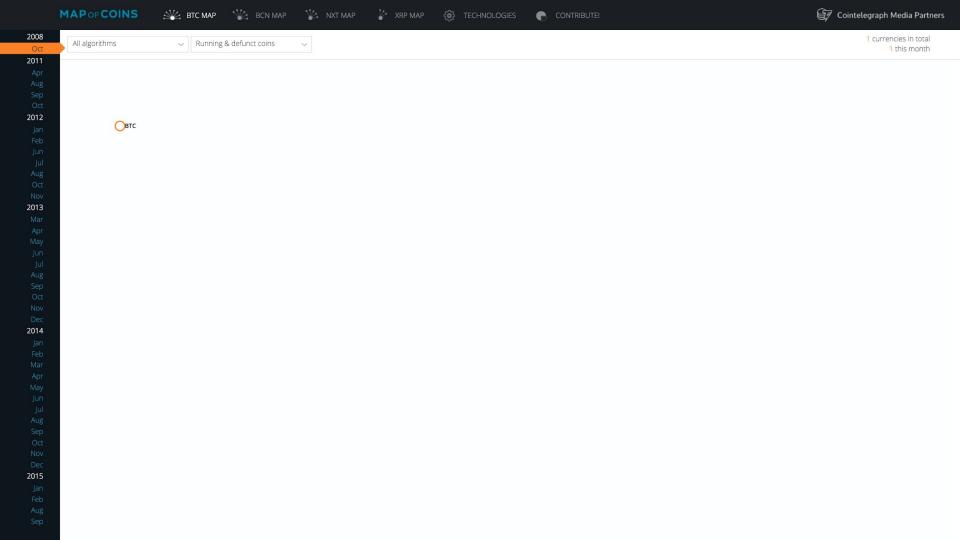
Cypherpunks Continue to Write Code as Governments Threaten Encryption

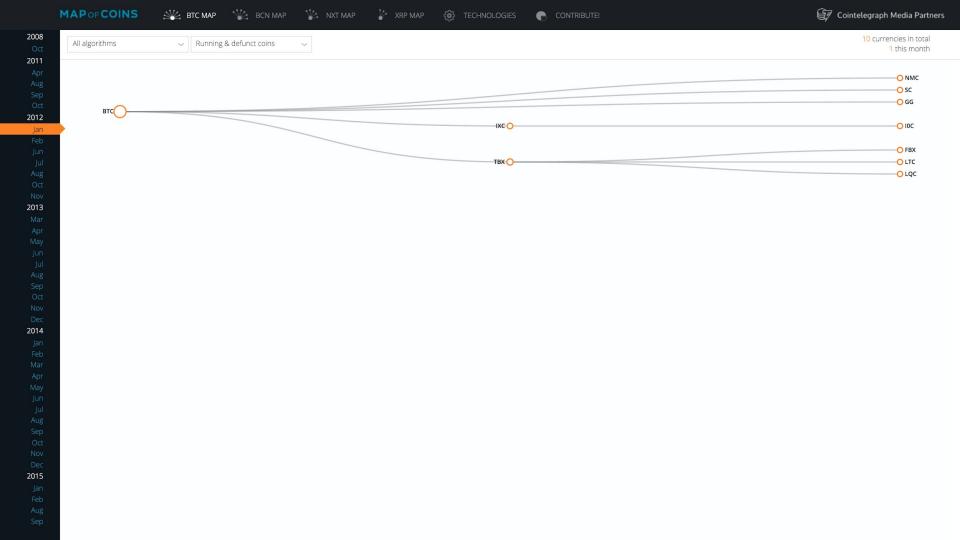
Stock Market Giant Deutsche Börse Working on Blockchain Prototypes

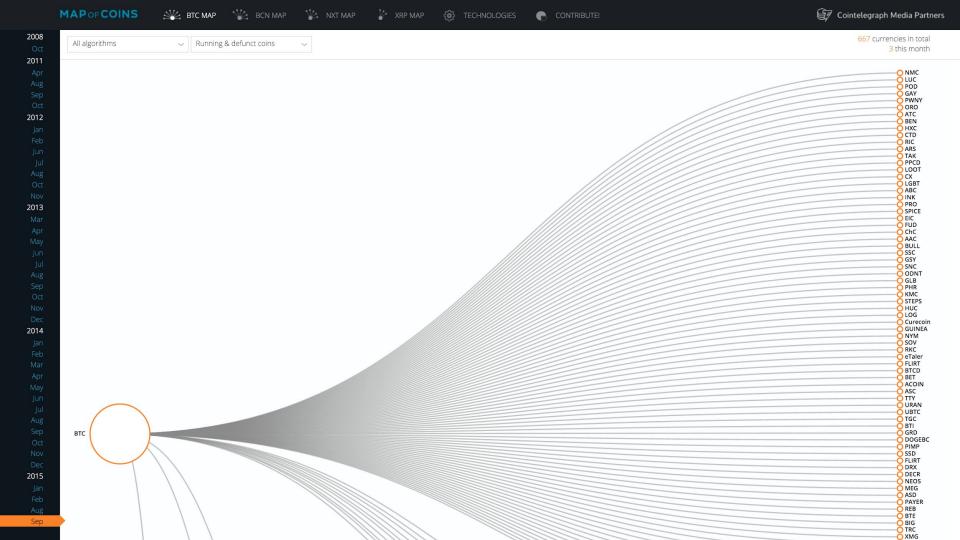














The Decentralized Exchange

Privacy-preserving payments

#### technology

	#991,274	UNCLES (CURRENT/LAST 50)  1/7		LAST BLOCK 8Sago			AVG BLOCK 18.52			66.1 C	RK HASHRA SH/S	TE	ξ	DIFFICUL 11.52		
Part				GAS LIMIT			PAGE LATENCY	96 ms	UPTIME				9996			
## ATTENTION	BLOCK TIME	Militaria.		BLOCK PROPAGATION	20% 10% s 10s		0x2a65aca4d5fc5b5	5c859090agg34d164135398226						1		
Discription   Section	The state of the s	1.1		GAS SPENDING	ul.		GAS LIMIT									
	() ATTENTION!								This page	does not re	epresent the	entire state of t	he ethereum n	network - listing a no	de on this page is a	voluntary process.
President   Common   Commo				>												
President   Committed states   Committed   Committ	○ [FD 2.0] Smartcontract ①	Geth/v1.3.2/linux/go1.5.1	55 ms		200		#991,274	8922e212f14acec9 7,031,828,19	97,521,580,000	2		8 s ago	• 0 ms		273 ms	100%
Description   Comment	Treasure Island - Sweden ①		61 ms				#991,274	7ec231a6d7b1e52a 7,031,828,19	97,521,580,000				• 0 ms		504 ms	100%
Content-clame   Content-clam	○ ETHERSPHERE HQ ①	Geth/v1.4.0-unstable/linux/go1.4.2	65 ms	0 KH/s	25		#991,274	8922e212f14acec9 7,031,828,19	97,521,580,000			8 s ago	• +155 ms		294 ms	100%
Part	○ 5chdn-supernode-chaos	Geth/v1.3.3-c541b38f/linux/go1.5.2	50 ms		490		#991,274	8922e212f14acec9 7,031,828,19	97,521,580,000	2		8 s ago	• +176 ms		128 ms	100%
Pattern Concessors - Galectic Calender C	O Schneckchen ①	pyeth/linux2/py2.7.9	136 ms				#991,274	8922e212f14acec9 7,031,828,19	97,521,580,000			8 s ago	• +298 ms	Mhh.		100%
Company   Comp			53 ms				#991,274	8922e212f14acec9 7,031,828,19	97,521,580,000			8 s ago	•+321 ms	ال المساد	2.9 s	100%
Open	○ We are the Borg		53 ms		100		#991,274	8922e212f14acec9 7,031,828,19	97,521,580,000			8 s ago	■+344 ms		392 ms	100%
Company   Comp	○ EtherealFlame	Geth/v1.3.3-c541b38f/linux/go1.5.1	8 ms	0 KH/s	25		#991,274	8922e212f14acec9 7,031,828,19	97,521,580,000	2		8 s ago	• +380 ms		358 ms	100%
Semicontence Lapari	○ iswt.io	Geth/v1.3.3/darwin/go1.5.2	34 ms				#991,274	8922e212f14acec9 7,031,828,19	97,521,580,000			8 s ago	• +416 ms	L	3.2 s	100%
O TONITT   Geth/vi.4. watchefulmor/get.5.1   62 m	o eth-golfer 1	Geth/v1.4.0-unstable/linux/go1.5.1	8 ms		13		#991,274	8922e212f14acec9 7,031,828,19	97,521,580,000	2		8 s ago	• +451 ms		576 ms	100%
O MINION MACH	○ SmartContractJapan2 ①	Geth/v1.4.0-unstable/linux/go1.5.1	74 ms		25		#991,274	8922e212f14acec9 7,031,828,19	97,521,580,000			8 s ago	• +487 ms	I	1.3 s	100%
Second Control   Seco	○ TriNiTiT	Geth/v1.4.0-unstable/linux/go1.5.1	62 ms		36		#991,274	8922e212f14acec9 7,031,828,19	97,521,580,000	2		8 s ago	• +524 ms		404 ms	100%
Contract Lapan   Cerby 1.3.3 (victoring 1.5.3   27 ms   3	○ MANIAK	Geth/v1.3.3/linux/go1.5.1	78 ms	0 KH/s	19		#991,274	8922e212f14acec9 7,031,828,19	97,521,580,000			8 s ago	• +560 ms		368 ms	100%
Smart Contract Japan   Geth/vi.3.3-c541538f/linux/gol.5.1   91 ms   3   25   1   8991,274   8922012_Hacced   7,031,838,197,521,580,000   2   1   7 s ago   *690 ms   543 ms   100%	O slock.it - master 1	++eth-v1.1.1-0/Release-Linux/g++/int	54 ms		76		#991,274	8922e212f14acec9 7,031,828,19	97,521,580,000			7 s ago	•+617 ms		1.2 s	100%
Stockit   Geth/vl.3.2-64004379/linux/gol.5.1   48 ms   3	○ -=LukzLuthorzEther=- ①	Geth/v1.3.3/darwin/go1.5.3	27 ms		25		#991,274	8922e212f14acec9 7,031,828,19	97,521,580,000			7 s ago	• +654 ms		356 ms	100%
Partiyl   Par	○ Smart Contract Japan	Geth/v1.3.3-c541b38f/linux/go1.5.1	91 ms		25		#991,274	8922e212f14acec9 7,031,828,19	97,521,580,000			7 s ago	• +690 ms		543 ms	100%
Of trustless privacy         Gethly 1.5.3 - unsane bo5e472c/limux/go1.5.1 in PNuc 45 ms         124.8 MH/s         14         0         #991,274         8922e121_flacece         7,031,828,197,521,580,000         2         1         7 sago         **4803 ms         545 ms         100%           IniTEH         Gethly 1.3.3/limux/go1.5.1         69 ms         0 kHyls         25         0         #991,274         8922e121_flacece         7,031,828,197,521,580,000         2         1         7 sago         **4803 ms         492 ms         100%           Ownority (i)         Parity/0.00/86, 64-gru-limux/nut18-nighty         73 ms         3         0         #991,274         8922e12_flacece         7,031,828,197,521,580,000         2         1         7 sago         **497 ms         716 ms         100%           Oxoditik (i)         Gethly/1.3.3-64lba58/limux/go1.5.1         56 ms         3         1         #991,274         8922e12_flacece         7,031,828,197,521,580,000         2         7 sago         **917 ms         7.16 ll/10%           Detail Island (i)         Gethly/1.3.3-64lba58/limux/go1.5.1         56 ms         3         1         1         #991,274         8922e12_flacece         7,031,828,197,521,580,000         2         7 sago         **915 ms         1.54 ms           Detail Island (ii)	O slock.it ①	Geth/v1.3.2-54904379/linux/go1.5.1	48 ms		25		#991,274	8922e212f14acec9 7,031,828,19	97,521,580,000			7 s ago	• +728 ms		472 ms	100%
C Instless-privacy         Geth/v1.5.3-unsane-b05ext7z(linux/gol.5.11/ePNuz 45 ms         124.8 MH/s         14         0         8991,274         8922e12_flaeced         7,031,828,197,521,580,000         2         1         7 ago         +4803 ms         545 ms         100%           kin2TH         Geth/v1.3.3/linux/gol.5.11         69 ms         0 kH/s/s         8         0         #991,274         8922e12_flaeced         7,031,828,197,521,580,000         2         1         7 ago         +480 ms         4/2 ms         100%           C stripy/sitche         Geth/v1.3.3.4/min/wgslp.5.11         65 ms         0 kH/s         8         0         #991,274         8922e112_flaeced         7,031,828,197,521,580,000         2         1         7 ago         +487 ms         7/16 ms         100%           O moditivi (I)         Geth/v1.3.3.4541b38/linux/gol.5.1         56 ms         8         1         9         1,74         8922e112_flaeced         7,031,828,197,521,580,000         2         1         7 ago         +915 ms         7/16 ms         100%           O bit         Minch         4         0         4991,274         8922e112_flaeced         7,031,828,197,521,580,000         2         1         7 ago         +915 ms         1,14 ms         100%           O bit	O peculiarity ①	Parity/0.9.0/x86_64-gnu-linux/rust1.8-nightly	56 ms		3	0	#991,274	8922e212f14acec9 7,031,828,19	97,521,580,000	0	0	7 s ago	•+781 ms	According to	1.3 s	100%
Stripyklitch Sethyl.3.3/windows/gol.5.1 Sethyl.3.3/windows/gol.5.1 Sethyl.3.3/windows/gol.5.1 Sethyl.3.3/windows/gol.5.1 Sethyl.3.3-windows/gol.5.1 Sethyl.	○ trustless-privacy	Geth/v1.5.3-unsane-b05e472c/linux/go1.5.1/×PNuc	45 ms	124.8 MH/s	14		#991,274	8922e212f14acec9 7,031,828,19	97,521,580,000			7 s ago	• +803 ms			100%
Wrocity	○ kin≣TH	Geth/v1.3.3/linux/go1.5.1	69 ms	0 KH/s	25		#991,274	8922e212f14acec9 7,031,828,19	97,521,580,000			7 s ago	• +845 ms		492 ms	100%
Wrocity	stripykitteh	Geth/v1.3.3/windows/go1.5.1	208 ms	0 KH/s			#991,274	8922e212f14acec9 7,031,828,10	97,521,580,000			7 s ago	•+873 ms		716 ms	100%
Ox. Nodellick 1	O wrocity ①	Parity/0.9.0/x86_64-gnu-linux/rust1.8-nightly	73 ms		3	0	#991,274	8922e212f14acec9 7,031,828,19	97,521,580,000	2	0	7 s ago	•+915 ms		3.6 s	100%
Ether Island ① Geth/y1.3.2-54904379/linux/go1.5.1 8 ms 0 KH/s 12 0 #991,274 8922212fl4acce9 7,031,828,197,521,580,000 2 1 7 s ago	O Nodellick 1 ①		56 ms				#991,274	8922e212f14acec9 7,031,828,19	97,521,580,000			7 s ago	•+939 ms			100%
Opening parity (node zero )         Parity (node zero )         Parity (node zero )         Parity (node zero )         S         3         0         #991,274         89222(2114acec 9 7031828197521580,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	○ Ether Island ①		8 ms	0 KH/s			#991,274	8922e212f14acec9 7,031,828,19	97,521,580,000				■+977 ms			100%
GraphDocker ① pyeth/linux/z/py2.7.9 154 ms ② 30 0 #991,272 b7d20b80d4a29c7 7,031,805,158,601,922,000 5 0 54 ago 0+3.5 s 1 15.2 s 100% ○ 101Reykjavik Geth/y1.3.3-c541b38f/linux/go1.5.1 64 ms 227.3 kH/s 11 2 #991,62 de90bed0a7ec5569 7,031,689,918,906,829,000 0 0 3 min ago 0+446 ms 1.3 s 100% ○ NODE-IDC Geth/y1.3.3/linux/go1.5.1 106 ms 3.4 kH/s 7 0 #991,122 Ofice?/lac.e2496951 7,031,111,485,513,181,000 0 0 19 min ago 0+43 s 100% ○ The Beast (Singapore) Geth/y1.3.3/linux/go1.5.1 115 ms 260 0 #991,195 1e82c4dc9541e07 7,030,915,532,006,879,000 7 0 2 1min ago 0+42 s 100% ○ GENETAL-BECK MSK Geth/y1.3.3/linux/go1.5.1 64 ms ② 13 26 #990,544 0e0d923017540b72 7,023,455,177,643,024,000 2 0 44 hago 0+104 ms ○ 100% ○ Schdn-miner+x390 Geth/y1.4.0-unstable/linux/go1.5.1 58 ms ② 13 26 #990,544 0e0d923017540b72 7,023,455,177,643,024,000 2 0 4 hago 0+104 ms ○ 100% ○ EtherPi ① Geth/y1.3.3/danvin/go1.5.1 58 ms ② 23 1040 #990,544 0e0d923017540b72 7,023,455,177,643,024,000 2 0 4 hago 0+1 min 100m ○ 100% ○ EtherPi ① Geth/y1.3.3/danvin/go1.5.2 58 ms ② 23 1040 #990,544 0e0d923017540b72 7,023,455,177,643,024,000 2 0 4 hago 0+1 min 100m ○ 100% ○ EtherPi ① Geth/y1.3.3/danvin/go1.5.2 58 ms ③ 23 1040 #990,544 0e0d923017540b72 7,023,455,177,643,024,000 1 0 0 9 hago 0+24 min 100m ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○ 100% ○	O parity node zero ①						#991,274	8922e212f14acec9 7,031,828,19	97,521,580,000	0						100%
101Reykjayik Geth/y1.3.3-c54lb38f/linux/gol.5.1 64 ms 227.3 KH/s 11 2 #991,62 de90bed0a7ec5569 7,031,689,918,906,829,00 0 0 3 min ago 0 +446 ms 1.3 s 100% 0 100	○ GraphDocker ①		154 ms		30		#991,272	b7d20b80d4a2f9c7 7,031,805,19	58,601,922,000	5		54 s ago				100%
NODE-DC   Geth/y1.3.3/linux/go1.5.1   106 ms   3.4 MH/s   7   0   #991,212   061ee7f8ce948991   7,031,111,485,513,181,000   0   0   19 min ago   0 +4.3 s   100 ms   100	① 101Reykjavík		64 ms	227.3 KH/s				de90bed0a7ec5569 7,031,689,91	18,906,829,000	0			o +446 ms			100%
Of the Beast (Singapore)         Geth/y1.3.3/linux/gol.5.1         115 ms         №         260         0         #991,195         1e82c4dc9541e07c         7,030,915,932,006,387,000         7         0         21 min ago         0 ±42.5 ms         ∞         100%           GEMPARA-BECK MSK         Geth/y1.3.3/linux/gol.5.1         67 ms         0 KH/s         220         3         #991,195         c8617841eebc4688 7,030,039,915,996,914,000         2         0         43 min ago         0 ±10 ms         ∞         100%           0 Schdn-miner-x390         Geth/y1.4.0-unstable/linux/gol.5.1         58 ms         №         45         4         #990,061         71294bl8d908d203         70,717,896,335,509,339,000         2         0         4 hago         0 ±10 ms         0         100%           EtherPi ()         Geth/y1.3.3-c541b38f/linux/gol.4.2         58 ms         №         23         1040         #989,534         b60/1471e8/2b887 7,011,517,366,384,348,000         10         9 hago         0 ±43 ms         100%           Distriction         Geth/y1.3.3-c541b38f/linux/gol.5.3         103 ms         №         0         3         898,534         b60/1471e8/2b887 7,011,517,366,384,348,000         10         9 hago         0 ±4 min         100min         100%           Onsensus Blase LIC.	O NODE-JDC		106 ms				#991,212						o +4.3 s			100%
Schdn-miner-x390   Geth/v1.4.0-unstable/linux/go1.5.1   64 ms   3   13   26   H990,544   0e0d923017540b72 7,023,455,177,643,024,000   2   0   4 h ago   0 +1 min   min   0   100%	○ The Beast (Singapore)		115 ms		260		#991,195	1e82c4dc9541e07c 7,030,915,53	32,006,387,000					Management		100%
○ Schdn-miner+x390         Geth/y1.4.0-unstable/linux/go1.5.1         64 ms         ○ 13         26         #990,544         0e0d923017540b72         7,023,455,177,643,024,000         2         0         4 h ago         0 + 1 min         0         100%           ○ EthopOutocat.com) Ether Mining pool         Geth/y1.4.0-unstable/linux/go1.5.1         58 ms         ○ 45         44         #990,067         7/624b88d9084208         7,011,513,65,893,899,399,000         4         0         6 h ago         0 + 4.3 s         100%           ○ Ethop1 ①         Geth/y1.3.3-G54lb38/linux/go1.4.2         58 ms         ○ 23         104         #989,534         b60d741_me8c2b887         7,011,5136,6384,348,000         10         0         9 h ago         0 + 24 min         100%           ○ InzHoop B2V         Geth/y1.3.3/darwin/go1.5.3         13 ms         ○         0         38         #974,303         5b5d9dedgeb60661geb1637b         6,793,710,502,149,758,000         1         0         2 days ago         0 ms         100%           ○ Consensus Base LLC. (Tokyo) ①         Geth/y1.4.0-unstable/linux/ge1.5.1         89 ms         ○         13         1         #970,762         2 deed05ge51637b         6,793,710,502,149,758,000         1         0         4 days ago         0 ms         100%           ○ c	○ GENERAŁ-BECK MSK	Geth/v1.3.3/linux/go1.5.1	67 ms	0 KH/s	220		#991,119	c8617841eebc46b8 7,030,039,91	15,996,914,000	2		43 min ago	o+104 ms			100%
Ethpool.utocat.com  Ether Mining pool   Geth/v1.4.0-unstable/ linux/go1.5.1   58 ms   3   454   4   #990,067   7fa2b4b8d908d208   7,017,896,336,509,359,000   4   0   6 h ago   0 +4.3 s	○ 5chdn-miner-x390		64 ms			26	#990,544							Military		100%
○ EtherPl ①         Geth/v1.3.3-c54lb38f/linux/go1.4.2         58 ms         ②         1040         #989,534         b60d7471e8c2b887 7,011,517,366,384,346,000         10         9 hago         0 ±4 min         100%           ○ InzHoop DEV         Geth/v1.3.3/darwin/go1.5.3         103 ms         ②         0         38         #974,303         5b05dd9d9bc60e1 6,834,646,011,802,259,000         1         0         2 days ago         0 ms         100%           ○ Consensus Base LLC. (Tokyo) ①         Geth/v1.4.0-unstable/linux/go1.5.1         89 ms         ②         13         1         #970,762         2afeed05ae51637b         6,793,710,502,149,758,000         1         0         4 days ago         0 ms	○ [Ethpool.utocat.com] Ether Mining pool		58 ms		454		#990,067	7fa2b4b8d908d208 7,017,896,3	36,509,359,000	4		6 h ago				100%
Diazhoop DEV   Geth/v1.3.3/darwin/go1.5.3   103 ms   23   03 ms   8974,303   5b05dddd9bc606e1 6,834,646,011,802,259,000 1 0 2 days ago □ 0 ms   100%	○ EtherPi ①	Geth/v1.3.3-c541b38f/linux/go1.4.2	58 ms			1040	#989,534	b60d7471e8c2b887 7,011,517,36	66,384,348,000	10		9 h ago		Marine		100%
○ Consensus Base LLC. (Tokyo) ①         Geth/v1.4.0-unstable/filmux/go1.5.1         89 ms         S         13         1         #970,762         2afeed05ae51637b         6,793,710,502,149,758,000         1         0         4 days ago         0 +874 ms	○ InzHoop ĐΞV	Geth/v1.3.3/darwin/go1.5.3	103 ms			38	#974,303	5b05dd9d9bc606e1 6,834,646,01	11,802,259,000			2 days ago	• 0 ms	DBB/bb/bb		100%
O sg.node.etherlink.co ①	Consensus Base LLC. (Tokyo) 1		89 ms				#970,762	2afeed05ae51637b 6,793,710,50	02,149,758,000				□+874 ms	- ha at man 1144		100%
	sg.node.etherlink.co ③													The state of the s		
O 16	Mined.nu Ethereum Node ③									0						

Icebox Christian Lundkvist A cold storage solution for Ether MIT	KingOfTheEtherT  Kieran Elby Will make you a King or Queen, might grant you riches, and will impopalizery(1) ————————————————————————————————————	Dactuary  Vignesh Sundaresan Decentralized actuary built on Ethereum  Occupation 2016-02-04	insurETH Thomas Bertani, Kristina Butkute, Francesco Canessa P2P flight insurance Apache Work in Pro2016.01-21	Venture Equity Ex  Ryan Tate, Sean Pollock Decentralized Autonomous Ventures proflowssy O Stealth Mode 2016-01-13	EthHypeDns slothbag Resolve Hyperboria/CJDNS ipv6 addresses via etherid.org propagatasy Q Live 2016-01-05	Maker / Dai  Maker Stable Cryptocurrency  MIT  Work in Pro2016-01-02	dappsys  Nexus Dev  Sollidity Contract System Framework  MIT ©  Working Pr 2016-01-02	Dapple  Nexus Dev smart contract package manager and build tool  MIT © Live 2016-01-02	KYC-chain  Edmund John  Proof of KYC  Requirements  Concept 2015-12-27	Cetas  Algorythmix  Decentralized KYC and Credit rating function on blockchain  Working Pr 2015-12-26	Verbatm  Claran Murray  A marketplace for employment credentials  Concept 2015-12-25
Decentralized Twi  Jahn Bertsch Microbiogging on the Ethereum blockchain  GPLv3 ()  Working Pr 2015-12-22	etherforum  Matias Insaurralde  An experimental / proof of concept / distributed forum built on top of Publidiburum   Work in Pro2015-12-21	4G Capital Smart  Erick Murimi Donors can use the application to fund small businesses in Kenya using digital currency. The Cancey fent is panyary to and disbursed to the	ethID  Argyris Xafis  Decentralised Password  Vault  Concept 2015-12-20	Dapp Store Tim Coulter Marketplace for Dapps Live 2015-12-11	iudex  Alex Beregszaszi, Thomas Bertani smart contract based reputation system MIT O   Working Pr 2015-12-10	JobMarket  Ultra Koder  Decentralized job market of the future for humans and loT MIT   Working Pr 2015-12-09	MetaMask  Aaron Davis  MetaMask brings Ethereum to your web browser  MIT O   Work in Pro2015-12-09	SafeMarket  Aakil Fernandes P2P Marketplace  Working Pr 2015-12-09	EtherID  Alexandre Naverniouk Ethereum Name Registrar  Apache  Live 2015-11-30	TinyOracle  Alex Beregszaszi Simple data provider toolkit for Ethereum  MIT • •  Working Pr 2015-11-25	Community-Curre  Rogelio Segovia  Community currency with  zero reserve mutual credit and adjustable page **  Work in Pro2015-11-24
Blockchain Backp  Dr. Blue  Valve Item Economy on Ethereum  Apache Concept 2015-11-23	RANDAO  Youcai  A DAO working as RNG of Ethereum  MIT   Work in Pro2015-11-23	proof-of-individua  d11e9 anti-sybil token  MIT Q  Work in Pro2015-11-20	Taxeme  Jeffrey B. Petersen A component of the Resilience taxation system  MIT C  Work in Pro2015-11-20	Browser-Solidity  chriseth & d11e9  Browser based solidity contract compiler & runtime MIT O  Live 2015-11-20	FreeMyVunk  R. Tyler Smith  Monitize your video game junk  Concept 2015-11-19	TokenEscrow  Alex Beregszaszi Contract for running an escrow service for Ethereum token-contracts  MIT  Work in Pro2015-11-16	Etherdice vnovak Provably fair and escrowed gambling  tive 2015-11-15	Etherboard  unknown  Combining a Ponzischeme with the  MillionDollarHomepage  Working Pr 2015-11-15	Syng  Jarrad Hope  The Mobile Client for the Ethereum Network  GPL   Working Pr 2015-11-15	String  Dominic Williams  Autonomous & open financial cloud for financial assets  Concept 2015-11-14	Ethereum Pyramid  ethererik Ethereum Pyramid Contract  tue  Live 2015-11-13
Ampliative Art  Adrian Onco A decentralized, cooperative and empowering art community Concept 2015-11-13	Shapeshift Bot  Alex Beregszaszi Simple Ethereum contract to transfer Ether to Bitcoin MIT O  Working Pr 2015-11-12	PublicVotes  Dominik Schiener A publicly verifiable Voting System, powered by Smart Contracts MIT  Working Pr 2015-11-12	Oraclize Thomas Bertani Provable honest oracle service Live 2015-11-10	Etheria  fivedogit  The first-ever decentralized virtual world  GPL O  Live 2015-11-07	Project Mati  Harsh Patel Decentralized KYC and Credit rating function on blockchain  Working Pr 2015-11-06	Spore  Denis Erfurt  Simple package manager for dApp development based on ethereum and MITI & Working Pr 2015-10-29	ethereum-datetime  Piper Merriam  Ethereum Date and Time tools  MIT () (a)  Working Pr 2015-10-07	Grove  Piper Merriam  Fast, efficient, queryable storage for ethereum contracts  MIT C  Live 2015-10-07	LightWallet  ConsenSys / Chris  Lundkvist  Lightweight JS Wallet for  Node and the browser  MIT ©  Working Pr 2015-10-07	Populus  Piper Merriam  Ethereum Contract  Development Framework  MIT   Working Pr 2015-10-07	Slock.it  Christoph Jentzsch If you can lock it, we will let you rent, sell or share it. GPL O  Working Pr 2015-10-02
meteor-embark  Chris Hitchcott  Streamlined Ethereum Integration for Meteor  MIT  Working Pr 2015-09-30	Colony  AttaAtta Companies for the 21st Century  Ownering Pr 2015-09-29	Dereo Dereo Decentralized over-the-air television streaming network Concept 2015-09-28	CryptoRPS CryptoRPS Rock-Paper-Scissor game with a twist  tust  2015-09-24	Dynamis  Joshua Davis Insurance Dapp   Work In Pro2015-09-24	Ethereum Alarm  Piper Merriam Schedule contract calls  MIT   Live 2015-09-24	Project Basil  Harsh Patel Decentralised Vulnerability feed management MIT ©  Working Pr 2015-09-15	AuditDog Roman Plášil SW audit repository  MIT • • Working Pr 2015-09-08	Universal ĐApp d11e9 A Universal Interface for contracts on the Ethereum blookchain MIT O Live 2015-09-03	Avatar d11e9 distributed profile registry  MIT  Working Pr 2015-08-28	EtherPot  Aakil Fernandes Provably Fair Lottery  MIT O  Working Pr 2015-08-27	HitFin  Patrick Salami  Bilateral settlement of OTC derivatives in 15 seconds  Concept 2015-08-26
Occams Run  d11e9  All things being equal (50/50) only The Brave will win MIT  Working Pr 2015-08-26	content d11e9 p2p community content platform MIT  Work in Pro2015-08-26	Raikoth moridinamael Governance experiment  C Concept 2015-08-26	Ethos d11e9 An Ethereum Browser MIT  Working Pr 2015-08-26	PirateChest  d11e9 p2p magnet discovery  MIT  Working Pr 2015-08-26	ChainGraph  Konstantin Kudryavtsev Blockchain visualizer  MIT O  Working Pr 2015-08-25	GroupGnosis Consensys / Martin Köppelmann Prediction market  tive 2015-08-25	Dapper  Jarrad Hope  High Level EVM Assembly meta-programming using Python  GPL/3	EtherListen  Kobi Gurkan Realtime Ethereum transaction visualizer.  MIT O  Live 2015-08-24	EtherWall  Aleš Katona GUI desktop wallet for Ethereum  GPLv3 🕡 🚭 Working Pr 2015-08-21	eDollar  nexus@makerdao.com Stable Cryptocurrency  proprietary C Concept 2015-08-20	studbook  Andres Junge Tinder for horses  MIT
EtherCrawler  Peter Borah A dungeon crawler and challenge market based on Ethereum MIT D  Demo 2015-08-17	Frozeth  Kobi Gurkan  Ethereum tools for the offline machine  MIT   Working Pr 2015-08-17	Augur  Jack Peterson, Joey  Krug, etc  Decentralized Prediction  Market  GPL  Overland Prediction  GPL  Overland Prediction  GPL  Overland Prediction  Market  GPL  Overland Prediction	Smart-exchange  Marek Kotewicz Exchange service  MIT • • Working Pr 2015-08-15	WeiFund Nick Dodson Crowdfunding Platform MIT  Working Pr 2015-08-15	Embark  luri Matias Framework for Ethereum DApps  MIT © Live 2015-08-15	EtherEx caktux Decentralized Exchange MIT • • Working Pr 2015-08-15	Etherparty  Lisa Cheng, Whit Jack  Smart Contracts deploying the Cloud  O  Concept 2015-08-15	Cosmo  Nick Dodson  Meteor dapp for building and vetting solidity contracts MIT ©  Working Pr 2015-08-15	EtherScan  Matt Tan  Blockchain explorer  Live 2015-08-14	Ether.Camp Roman Mandeleil Blockchain explorer Live 2015-08-13	NotarEth  Maran Hidskes Ethereum based notary service  MIT • •  Live 2015-08-13
HonestDice etherapps info	Vevue	PowerBall Peter Borah	cyber•Fund	Spritzle	WeiLend Massi Terzi	Truffle	Jaakme.in Vaughn McKenzie	Croesus	Otonomos Han Vertraete	chess_contracts	TrustlessPrivacy

#### R3 CEV's Consortium: 42 Banks with Combined \$600bn+ Market Cap; 60% Are Global SIFIs





















































































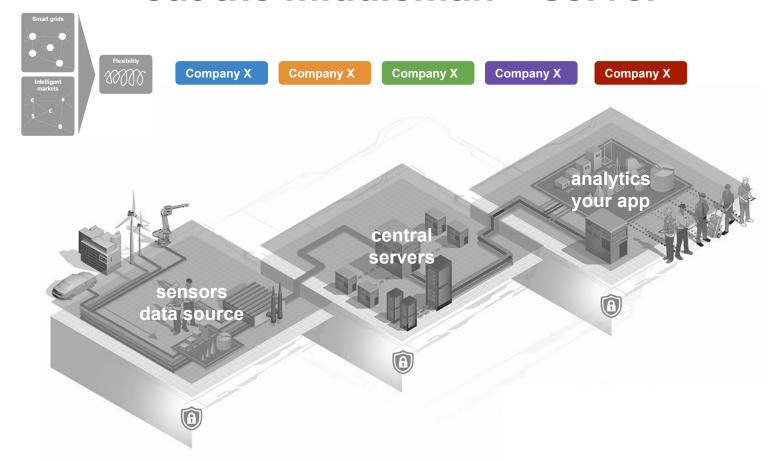


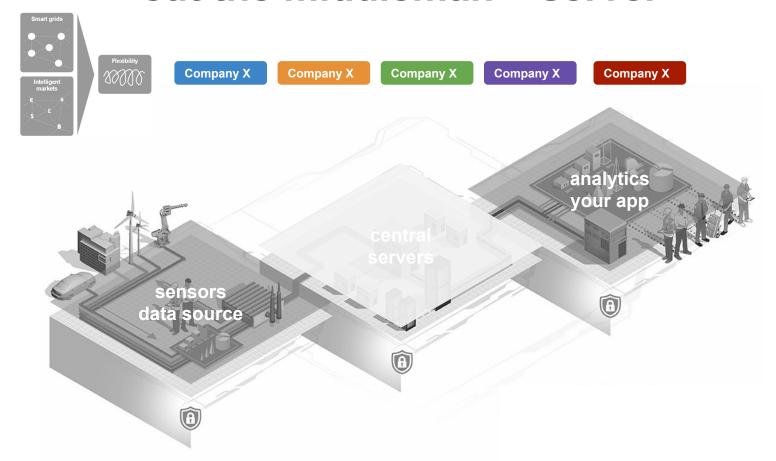


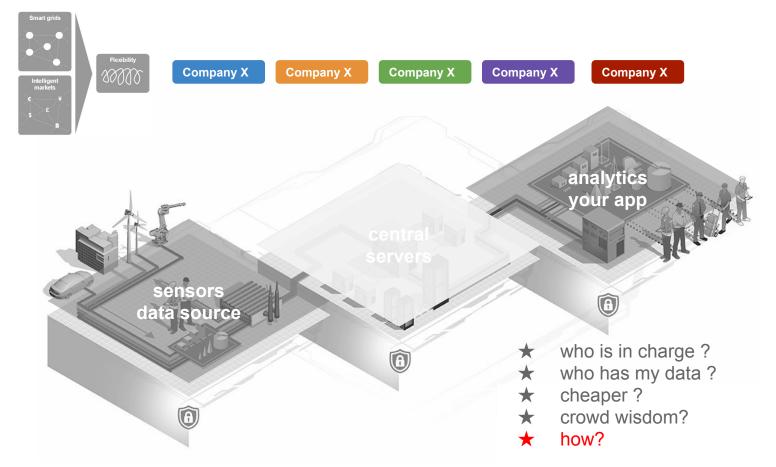
K National Australia Bank

Source: CoinDesk

CoinDesk

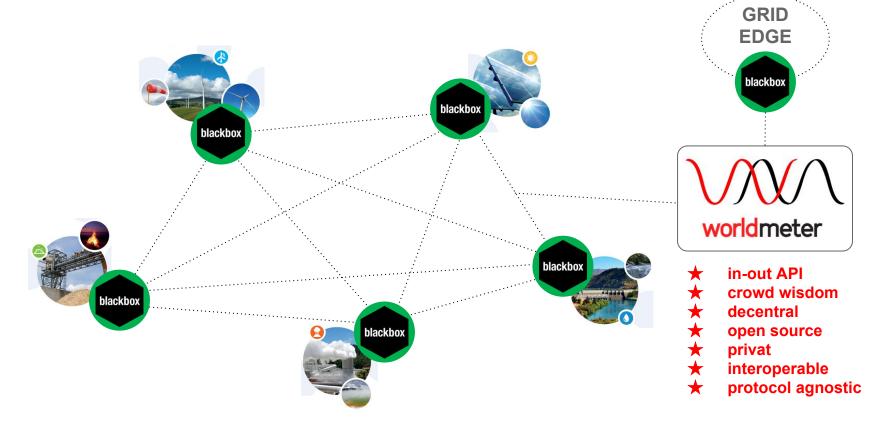




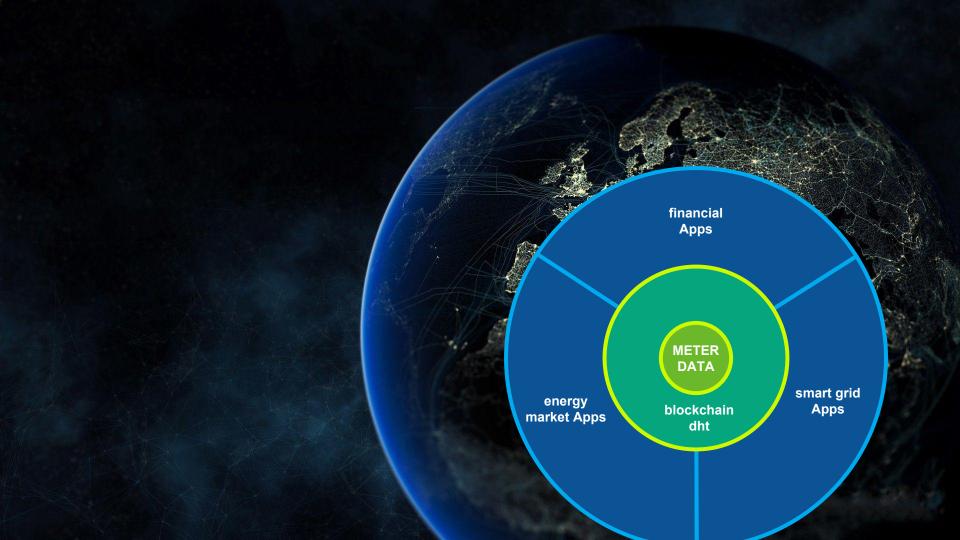




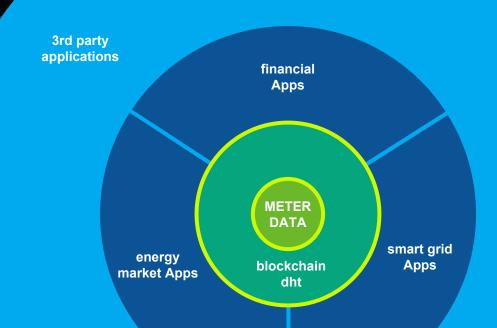
#### Worldmeter.io Platform



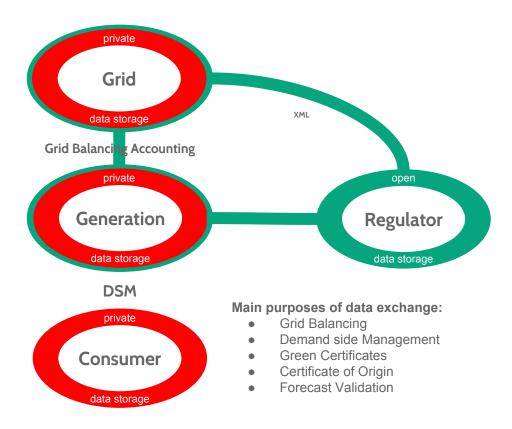




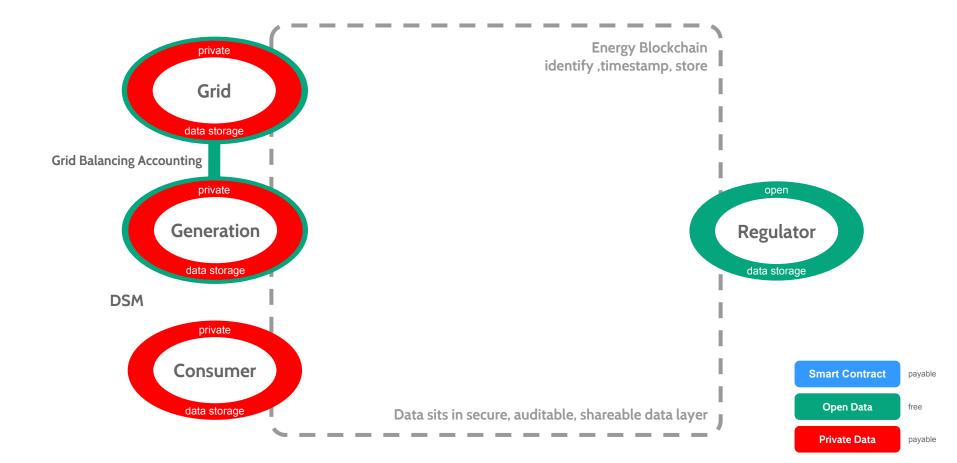
## Grid Singularity gridsingularity.com

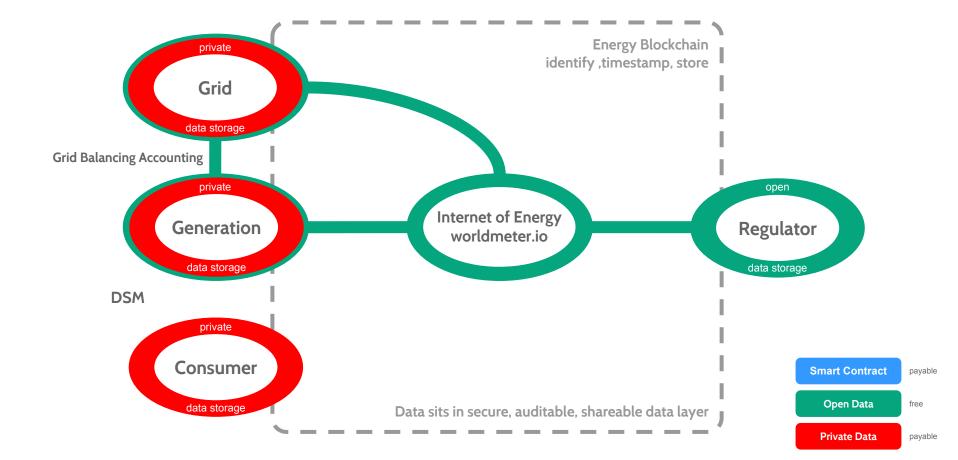


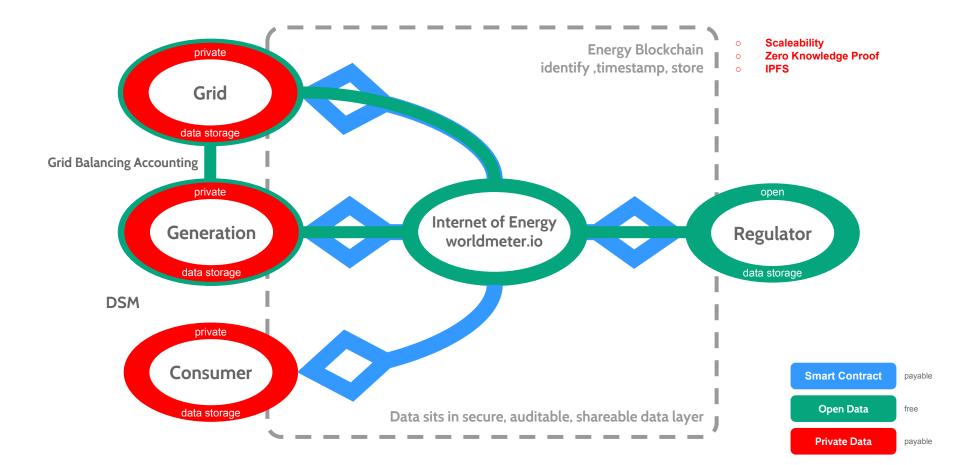
#### **Energy Information** - now

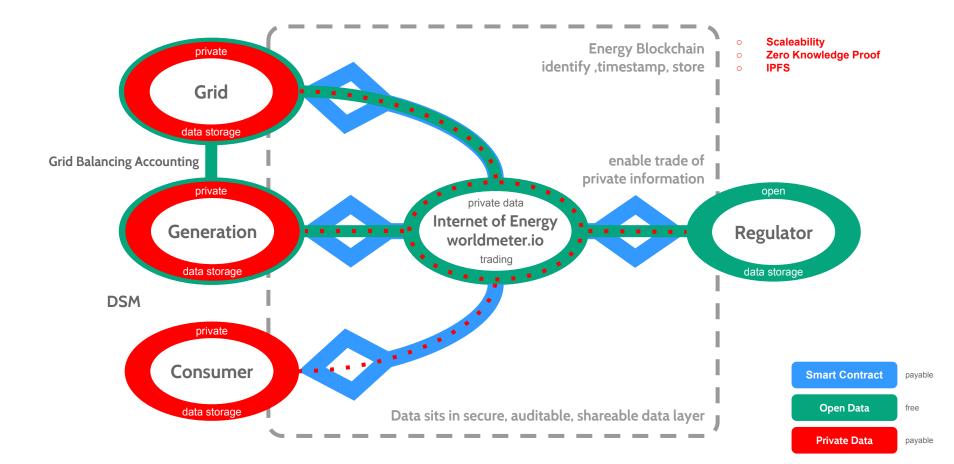






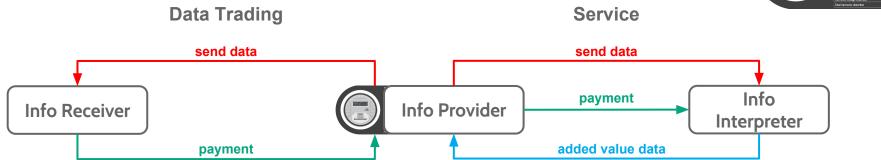






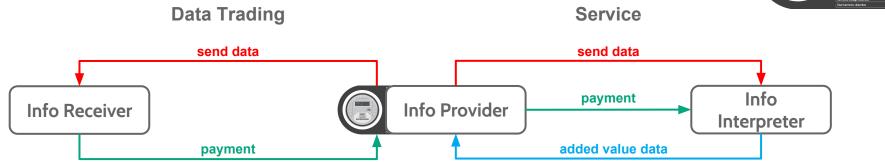
#### Information Exchange





#### Information Exchange





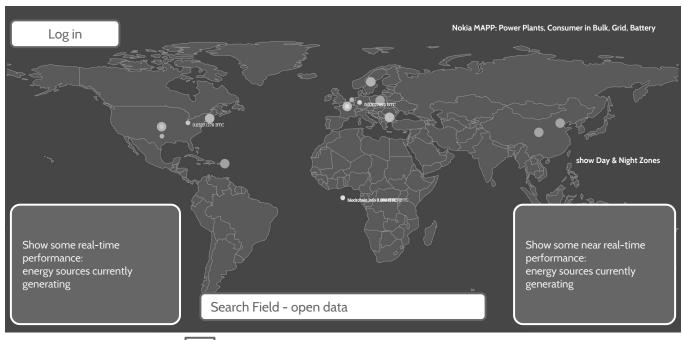
Data Type	Location	Granularity	Data Age
Open by Law	anonymous	yearly	"old" data
Technical			
Capacity			
Financial	gps & identification	millisecond	real-time

#### Information Gateway - worldmeter.io

- 1. Data on page delayed by X hours.
- 2. realtime data & stream available upon Login
- 3. map centered around gps point of visitors IP address

vision button

how would that map look like if we would have already the world connected

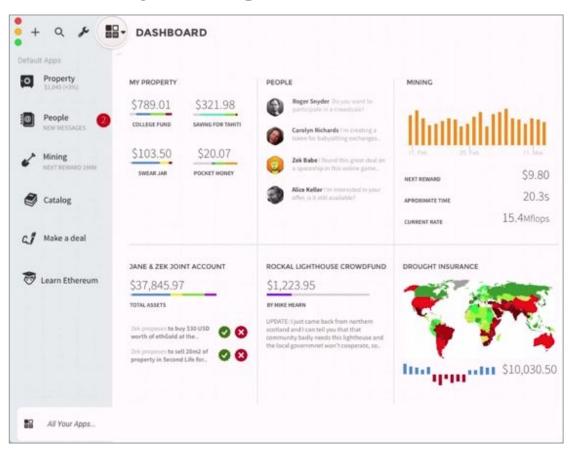




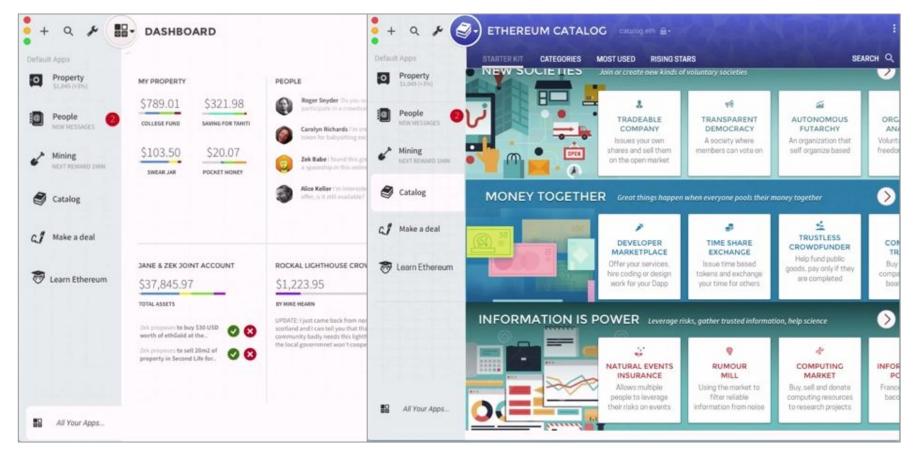
News feed on:

- 1. new Dapps
- 2. Twitter
- 3. new Information Sources
- 4. Grid Edge & Transactive Grid News

#### Gateway - Login



#### Gateway - Login



#### Apps & DApps

**Asset Performance** Operation & Benchmark **Secondary Market Monitoring Maintenance Performance** Crowdfund **Balancing Group Forecast Asset Valuation Data Source Energy Brainpool Connections Secondary / Tertiary** Market Analysis / **Energy Trading Emission Certificate** Platform Reserve Research **Generation / Trading Micro Grid Project Development World Green Bond Funding Platform** / Country Management

#### Apps & DApps

**Secondary Market** 

Balancing Group
Accounting

Secondary / Tertiary Reserve

World Green Bond

**Project** 

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Operation & Maintenance

Crowdfund
Data Source
Connections

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tform

**Emission Certificate Generation / Trading** 

Micro Grid Management

...

### Vielen Dank!

@gridsingularity.com