

SECURE. PRIVATE. UNTRACEABLE.



MONERO

Budapest, Hungary

Welcome

Justin Ehrenhofer

Finance
Management Information Systems

/u/SamsungGalaxyPlayer or sgp_



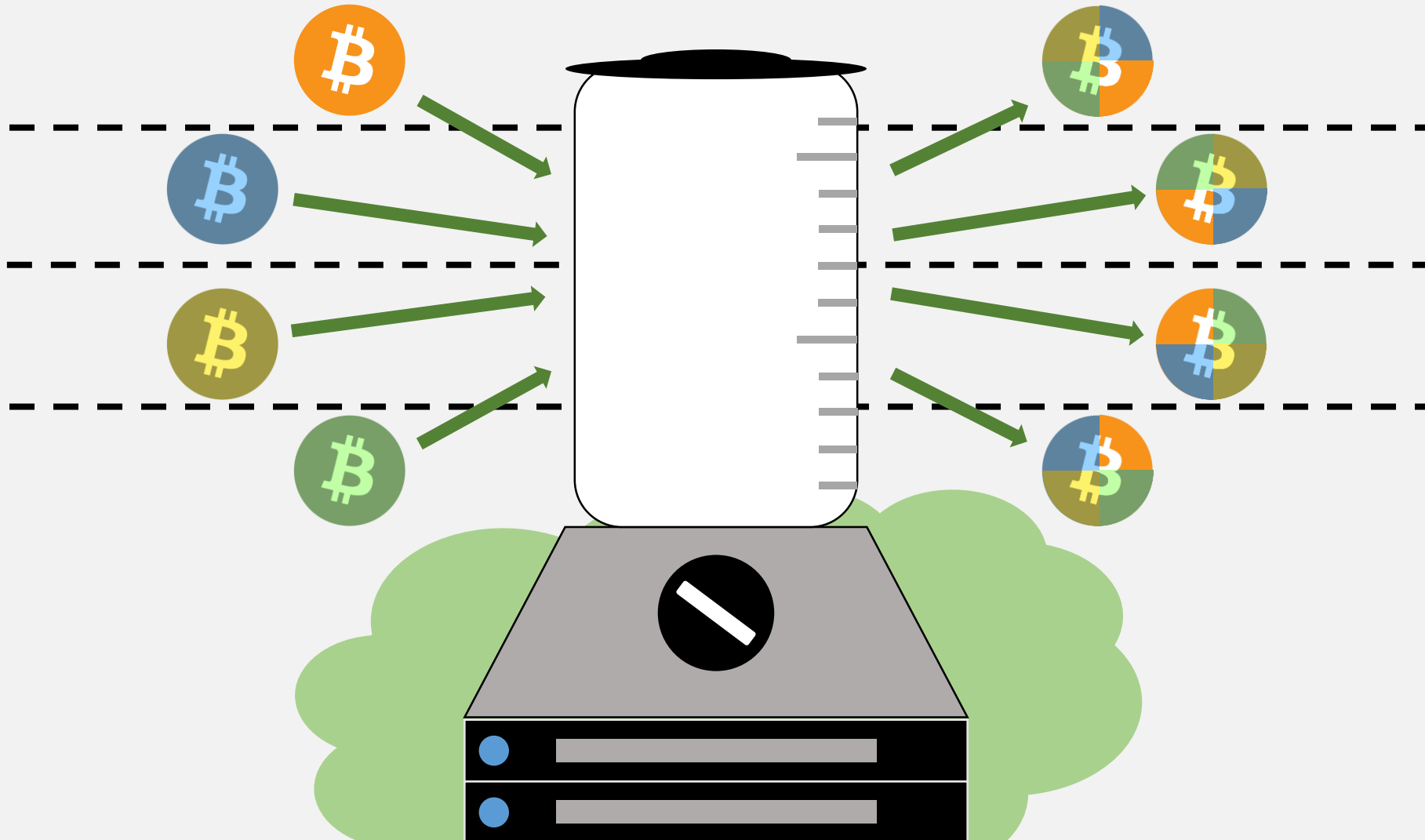
UNIVERSITY OF MINNESOTA
Driven to DiscoverSM

WU
WIRTSCHAFTS
UNIVERSITÄT
WIEN VIENNA
UNIVERSITY OF
ECONOMICS
AND BUSINESS

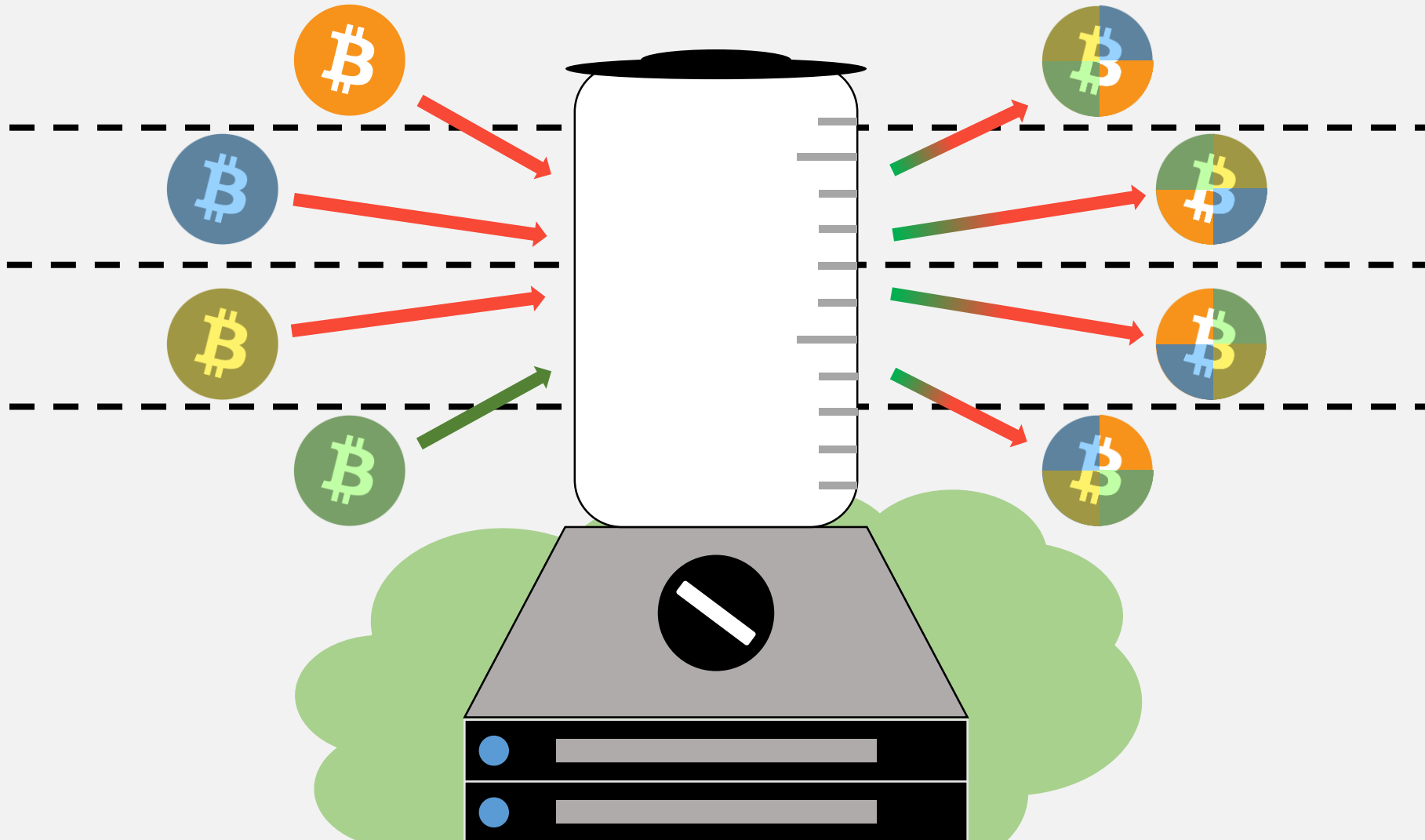


CryptoUMN.com

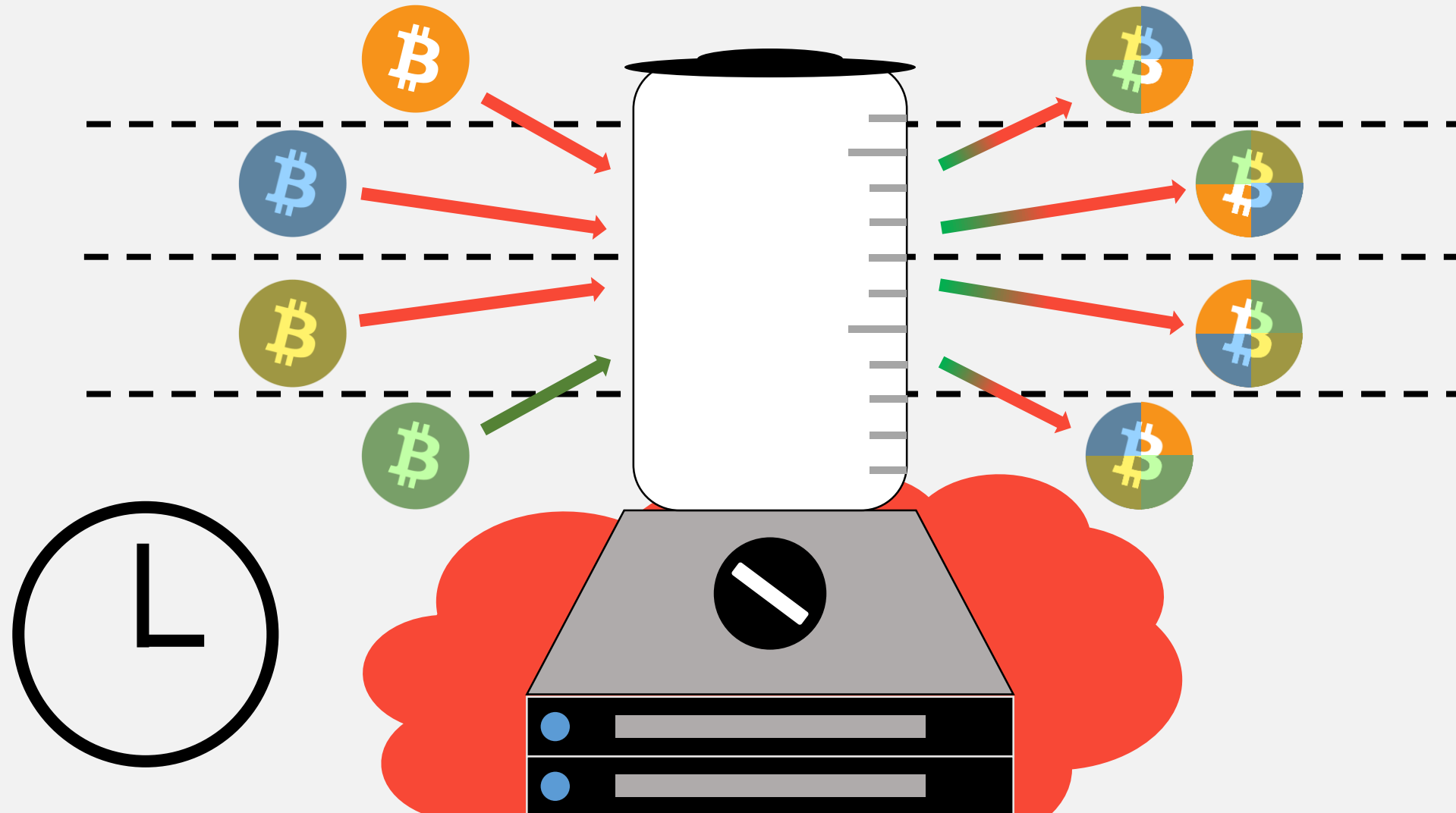
People Started Adding Tools to Bitcoin



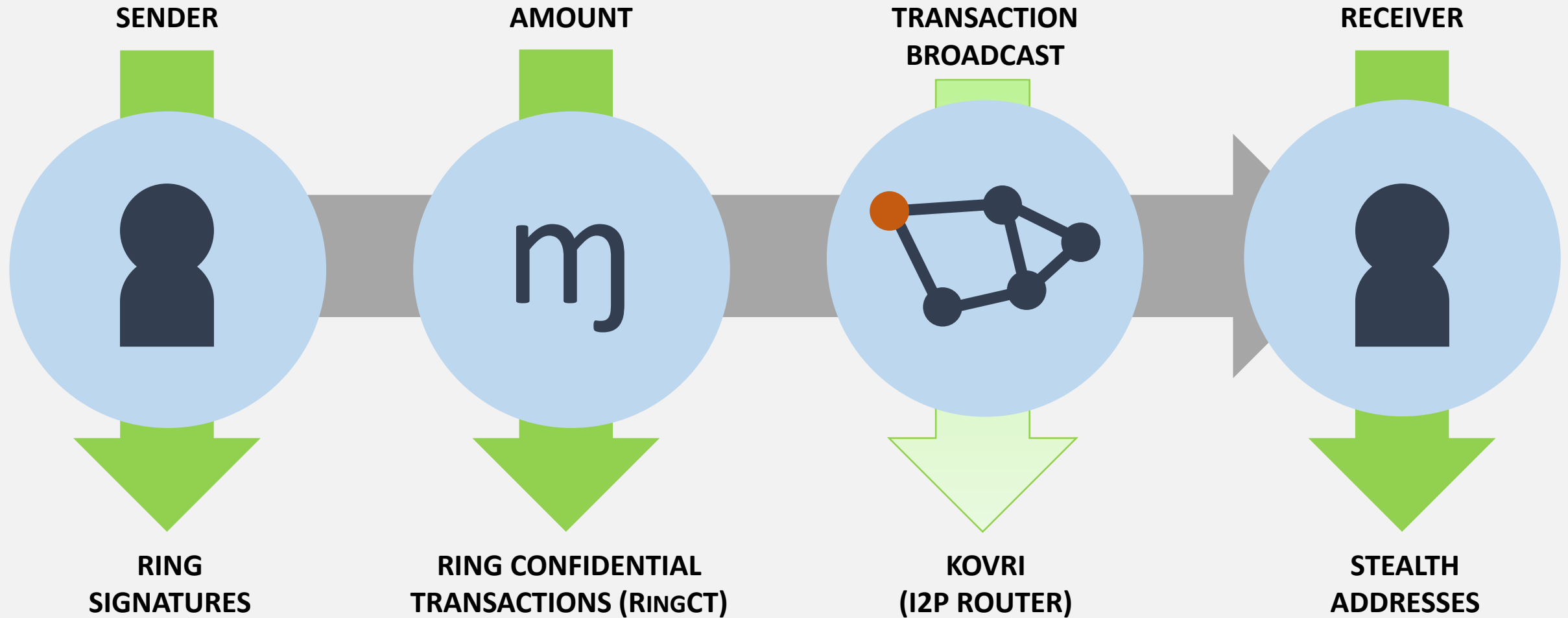
People Started Adding Tools to Bitcoin



People Started Adding Tools to Bitcoin



The Monero Difference



Ring Signatures & RingCT

BLOCKCHAIN

1 (Tx ID e4hn4ifqyd5ed)

8 (Tx ID hng6iwfumwf8)

15 (Tx ID wn3f4diiijffwn)

2 (Tx ID eshgni5lsvnf74)

9 (Tx ID cb8vqfi8dfj65f)

16 (Tx ID 5 f8wnfdmmii)

3 (Tx ID wb4f5hdfdicnd)

10 (Tx ID fnidmfnu3dm8)

17 (Tx ID h8fn5mdfi4w)

4 (Tx ID nh5nogsefwjw)

11 (Tx ID twv8mf8dnfas)

18 (Tx ID n48gfwmfdki)

5 (Tx ID fgwinw3fwtk54)

12 (Tx ID h5o8mfdngkd)

19 (Tx ID fnidmnfdsam)

6 (Tx ID ybwnng8nengf)

13 (Tx ID 7nr8mrjffijdtm)

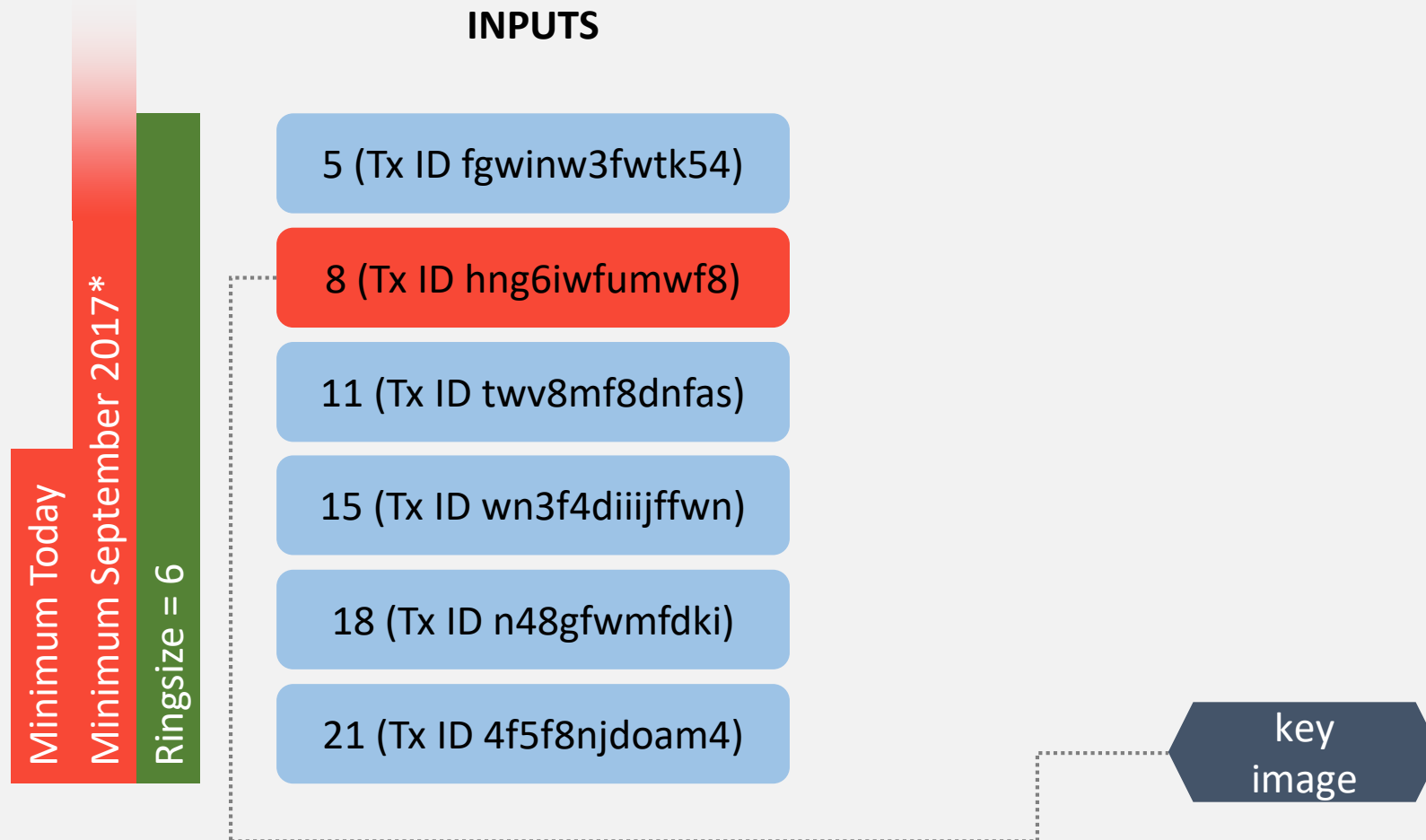
20 (Tx ID t4vn8lf8djer4)

7 (Tx ID e4bgn8flwwrj8)

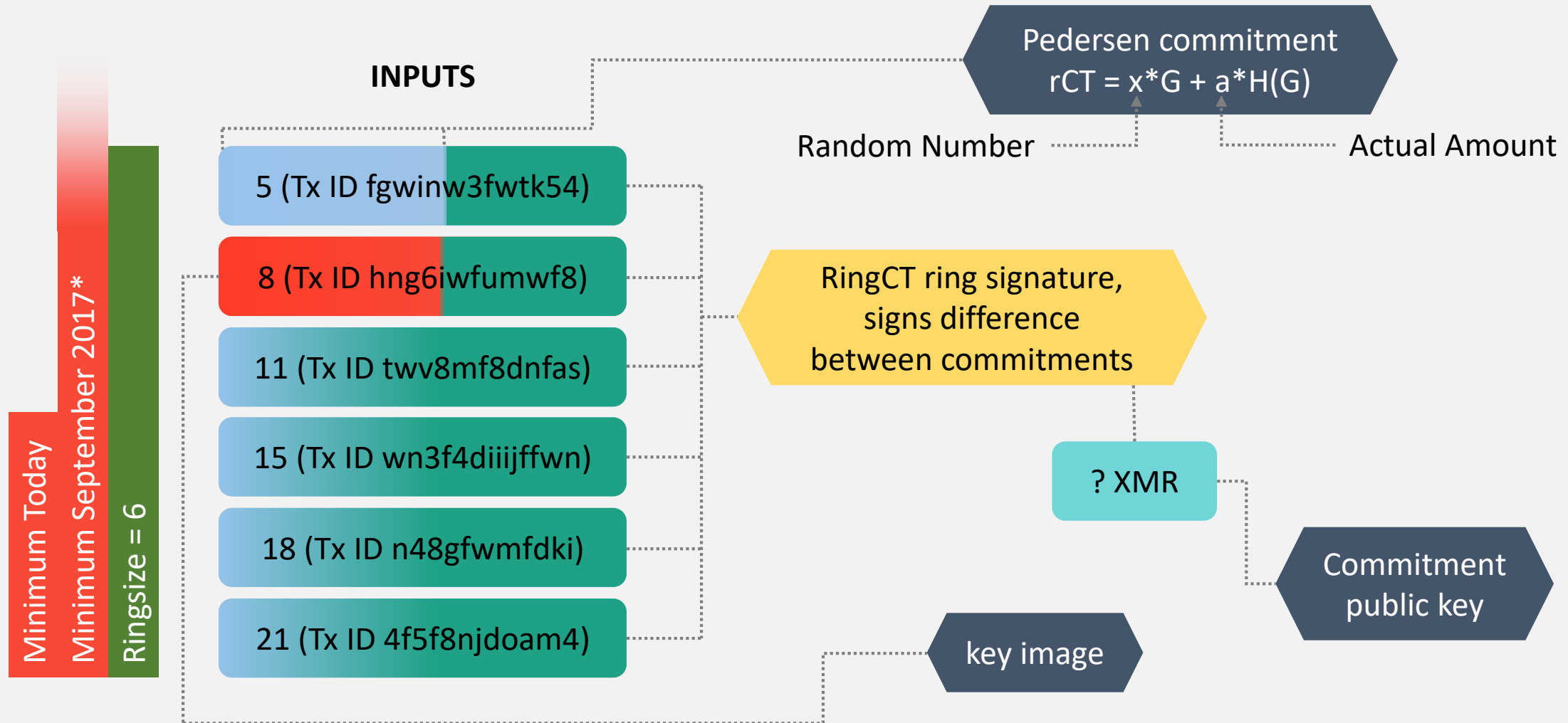
14 (Tx ID f8n8madkrjmd)

21 (Tx ID 4f5f8njdoam4)

Ring Signatures & RingCT

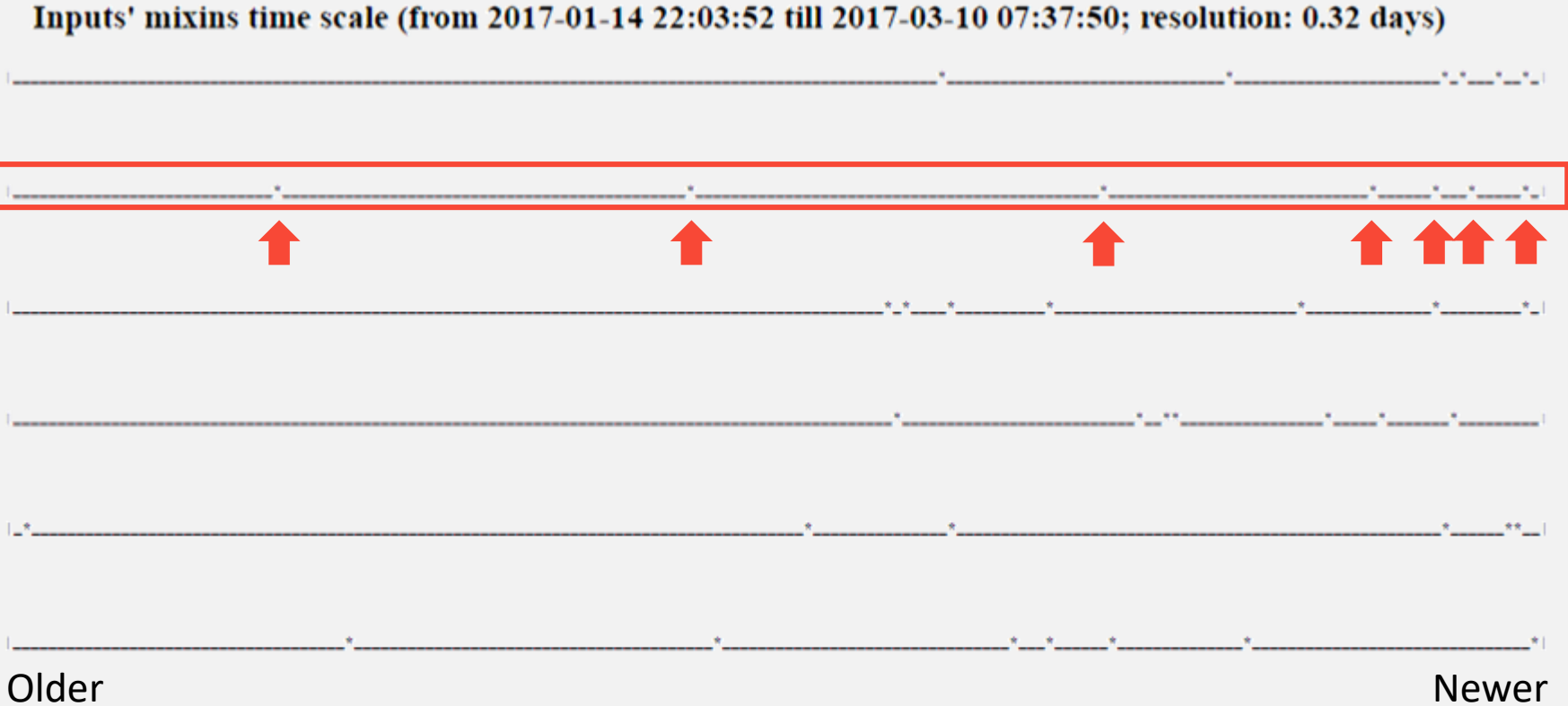
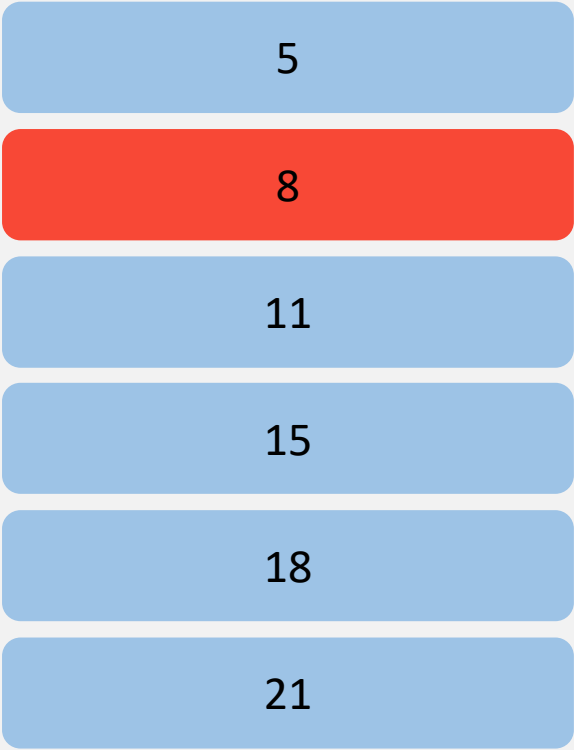


Ring Signatures & RingCT

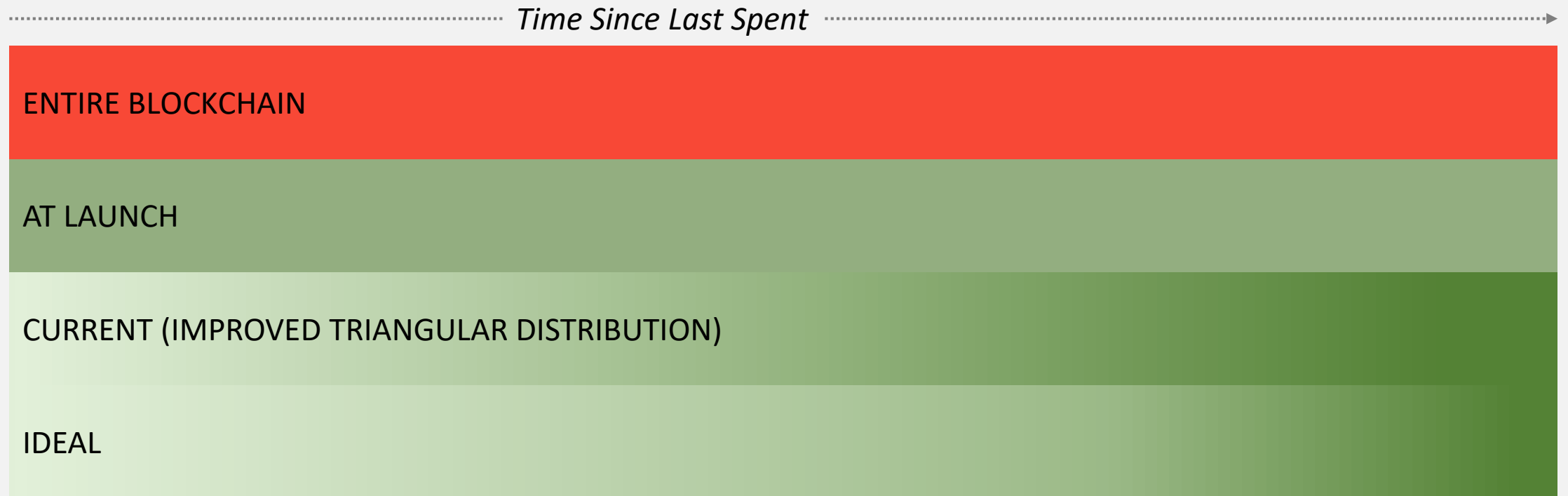


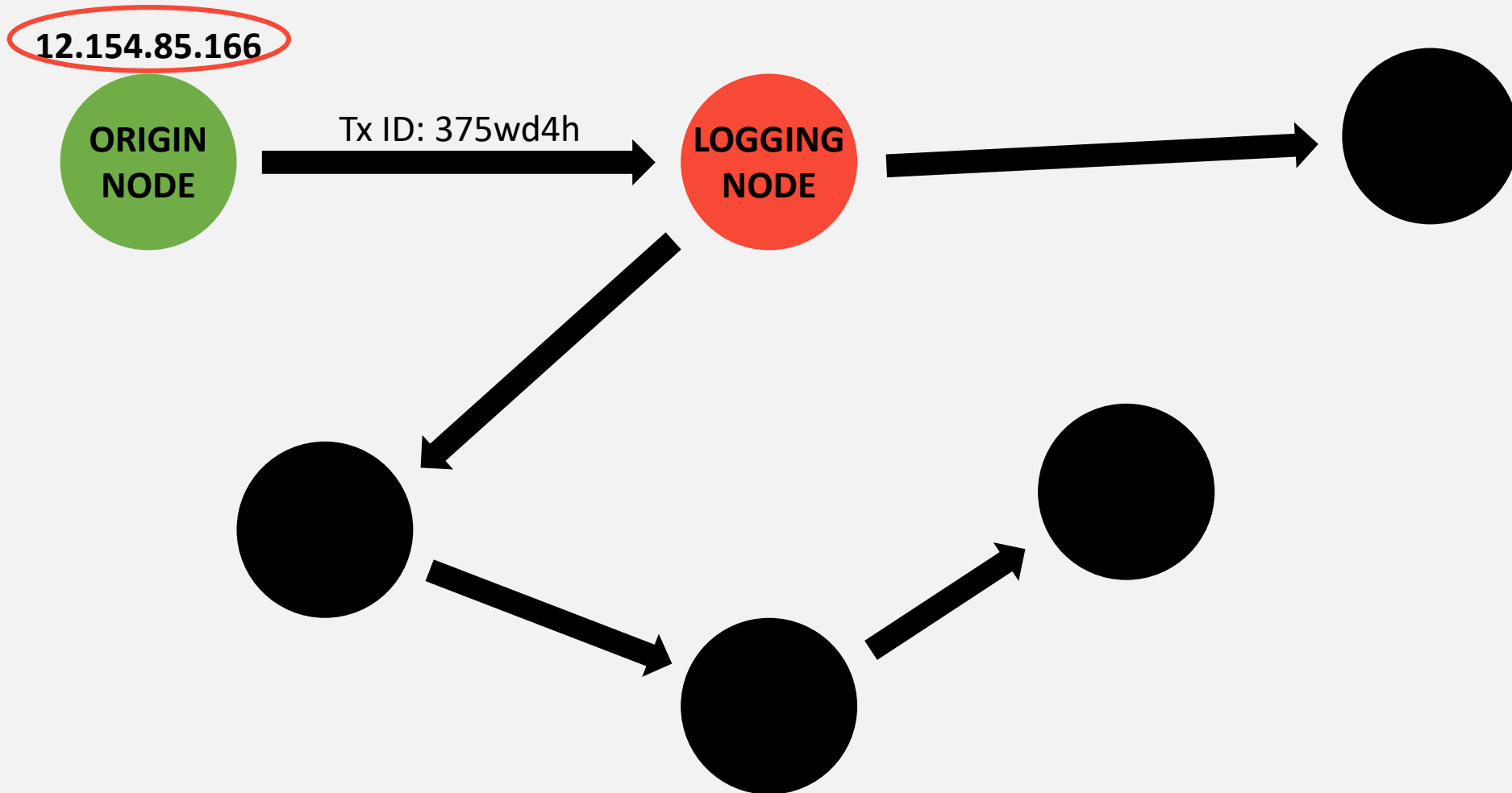
Ring Signatures & RingCT

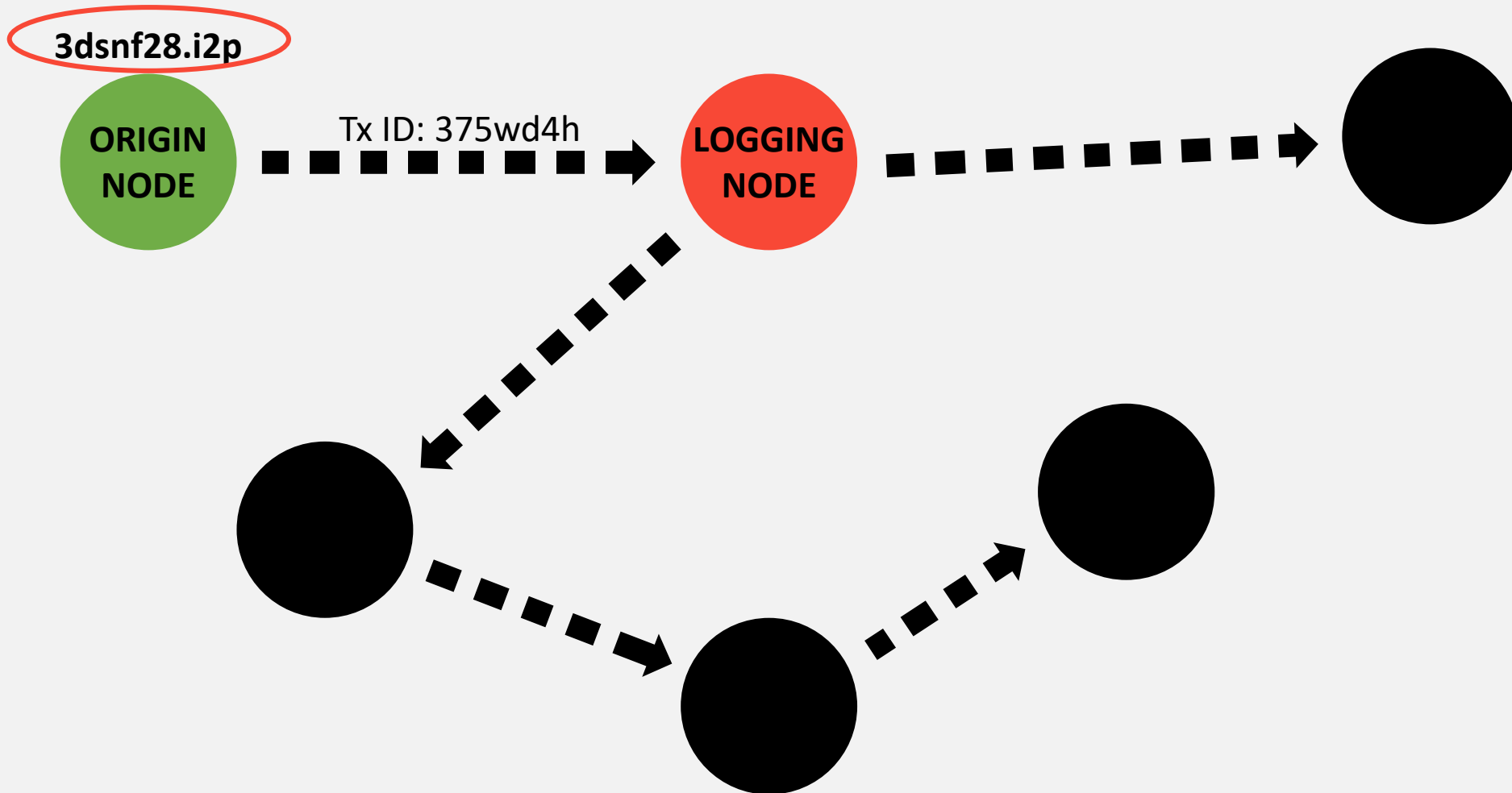
INPUTS



How Inputs Are Selected









-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA256

Coming soon!

Until we are up and running, visit:

<https://getmonero.org>
<https://github.com/monero-project/kovri>

Contact:

ric@spagni.net
BDA6 BD70 42B7 21C4 67A9 759D 7455 C5E3 C0CD CEB9

anonical@mail.i2p
1218 6272 CD48 E253 9E2D D29B 66A7 6ECF 9144 09F1

-----BEGIN PGP SIGNATURE-----
Version: GnuPG v2

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iQIcBAEBCAAGBQJWsJidAAoJEGanbs+RRAnxt68QA7m8K9WeVP/1wJ60CSLa9Cpo
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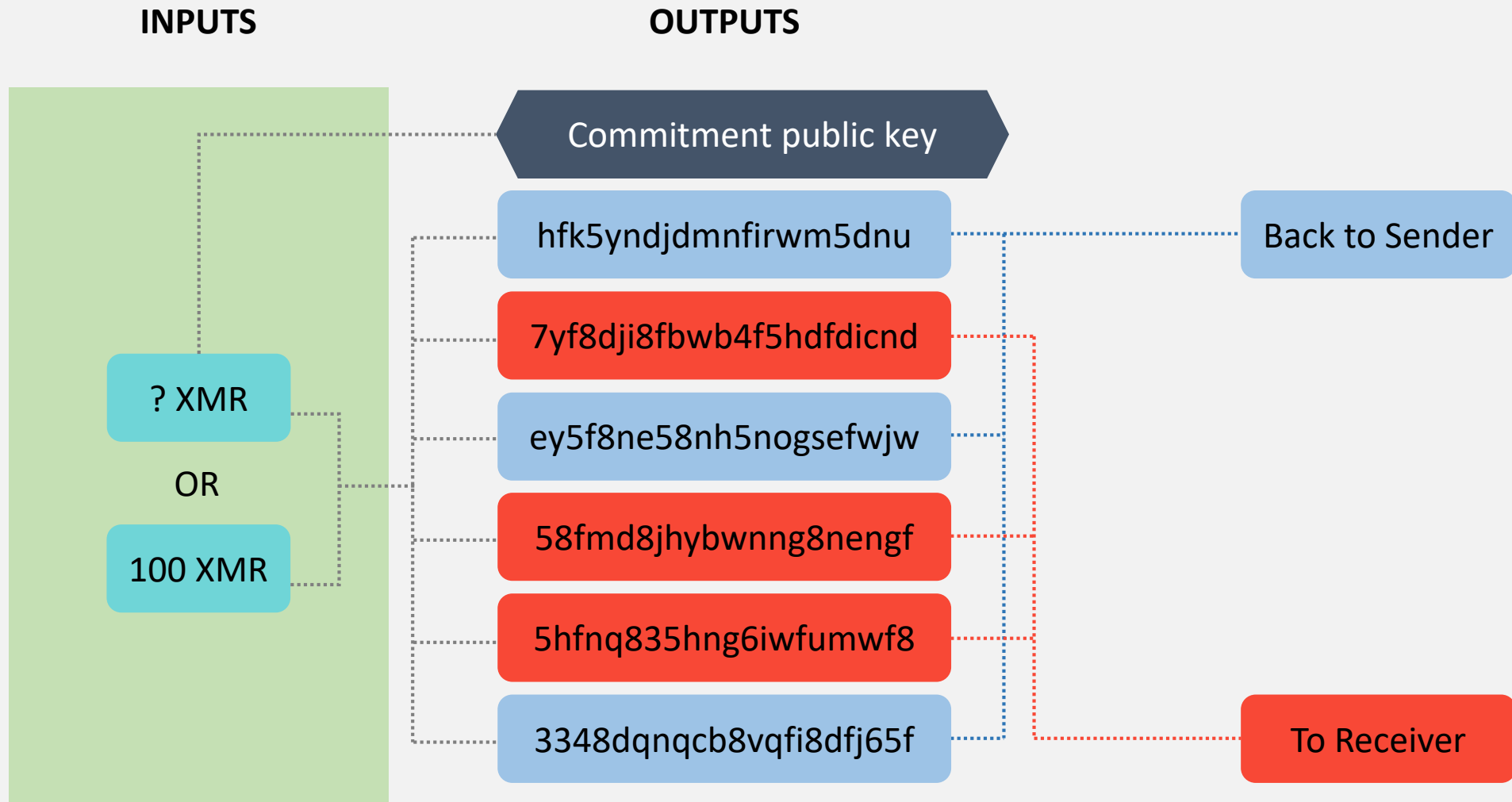
-----END PGP SIGNATURE-----

Downloads

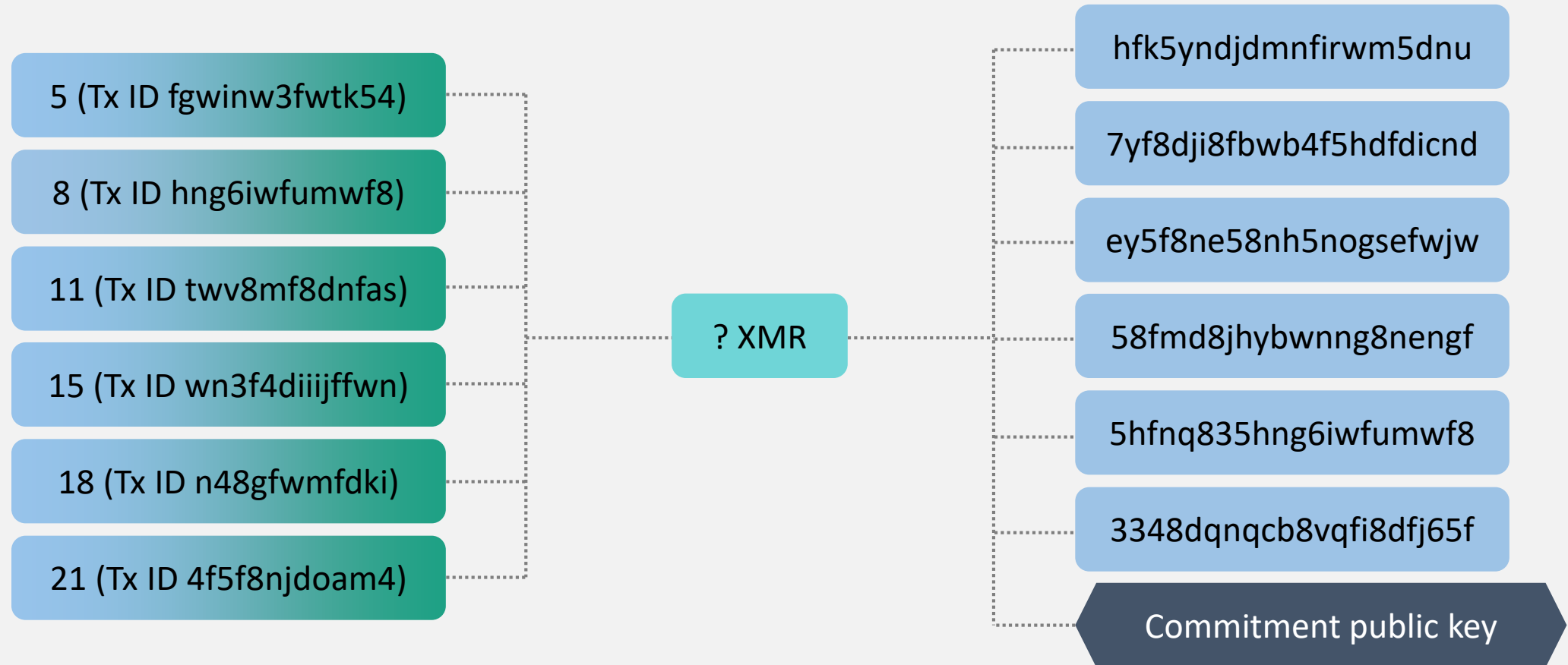
Releases

Alpha release coming soon

Stealth Addresses



Summary

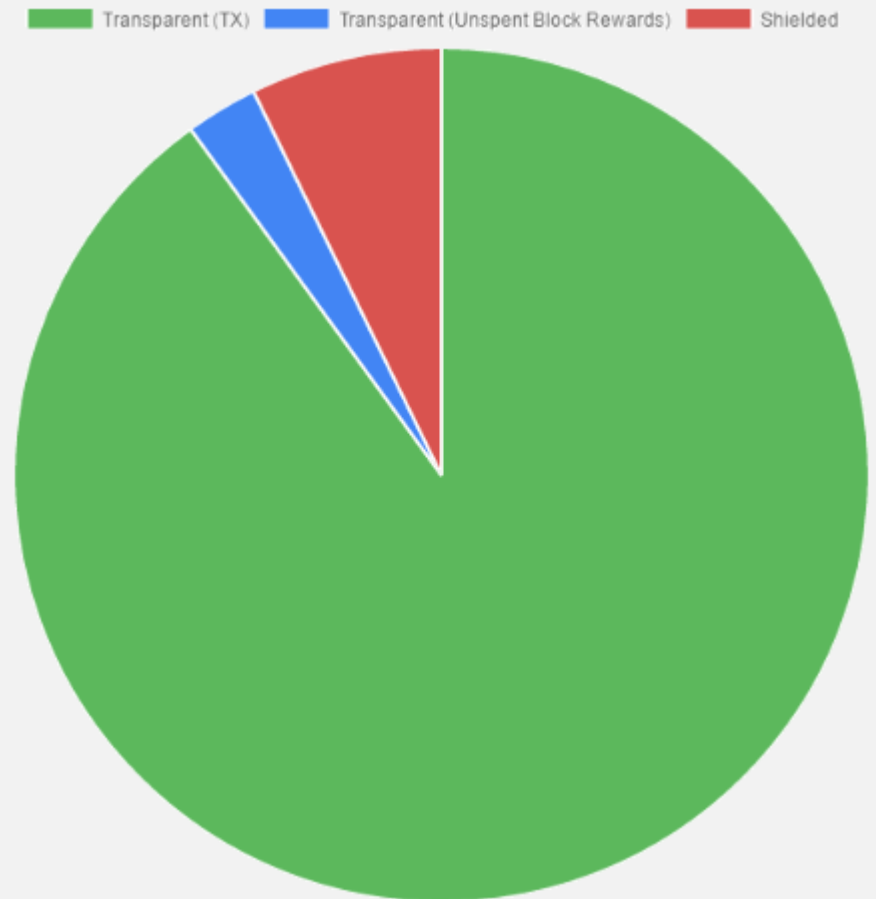


Mandatory Privacy

mixins used in transactions (%)

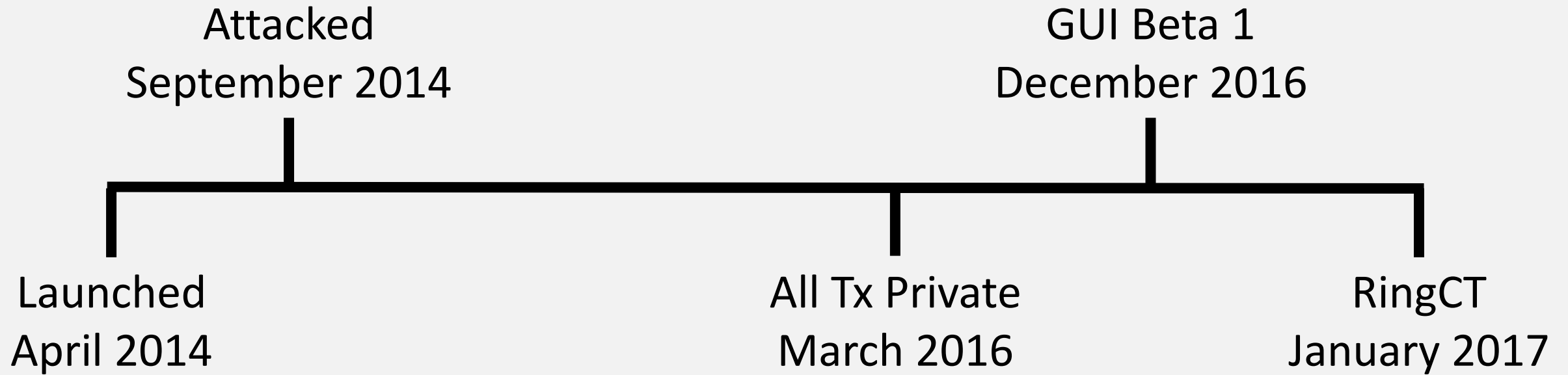
mixin:	none :(1 - 2	3 - 9
last day	66.74	10.95	20.25
last week	66.11	6.96	24.76
last month	64.47	5.42	28.13
last year	73.04	7.36	18.16

Source: MoneroBlocks.info 24 Feb 2016



Source: zcha.in 15 March 2017

A Brief History



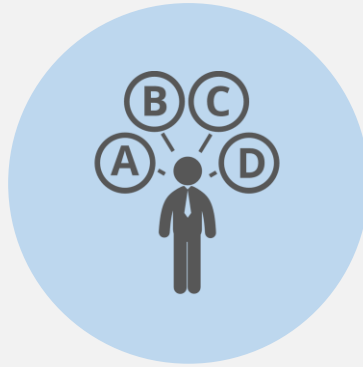
Regulatory Compliance and Transparency

(with the View Key)



Transparency

A view key is used to reveal all transactions for a Monero account, or just the key for a single transaction



Selected Parties

View keys can be given to selected parties, or can be made public



Charities

By publishing their view key, charities can invite easy public oversight



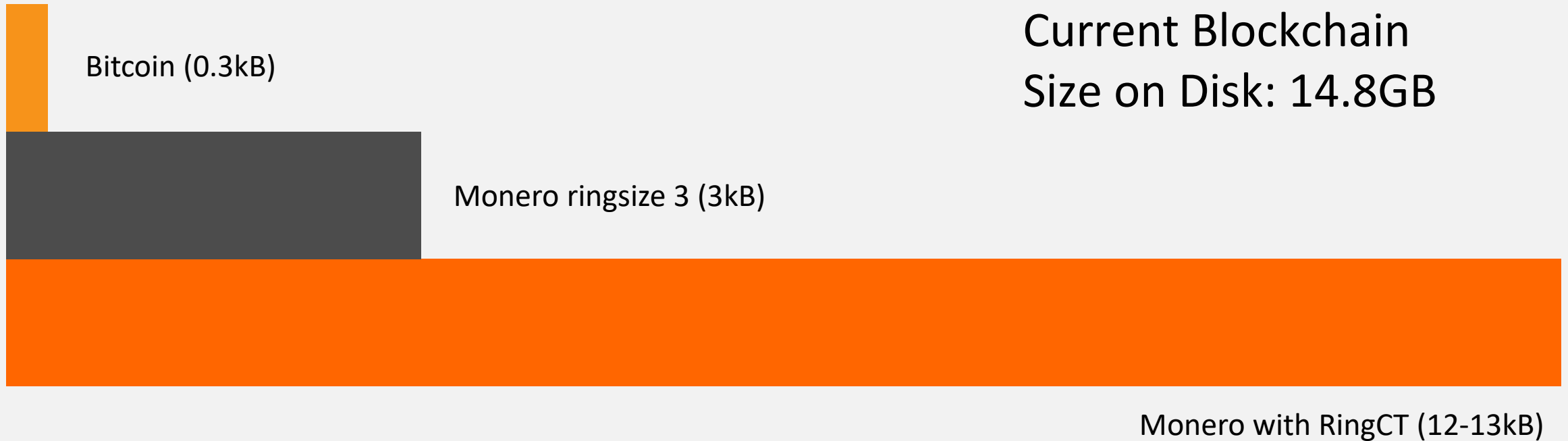
Parents

Children can be given their own accounts, and parents can monitor their spending

Monero Limitations



Monero Limitations



Addressing Transaction Size



1. RingCT is brand new; optimizations could reduce transaction sizes by 20%
2. Prune non-essential parts of blockchain for 50% size reduction. Sharding possible
3. Large hard drives are cheap, and prices continue to fall (even if lagging behind Moore's Law)
4. Any real scaling needs to be done off-chain anyway (eg: LN, MimbleWimble)

Ongoing Development



Multisig



Sub-Addresses &
Disposable Addresses



Translations

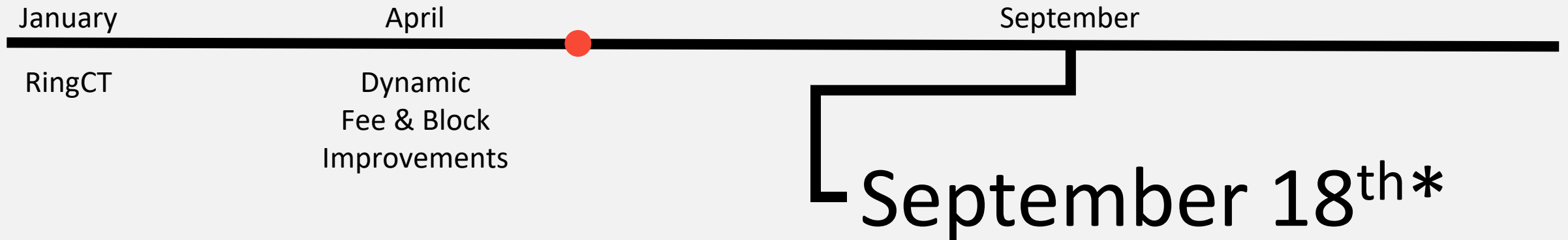


Lightweight
Wallet



Website
Redesign

Hardfork Schedule



- **Mandatory RingCT**
- **Minimum ringsize ≥ 5**
- Fluffy blocks
- Improved input selection algorithm

Thank You!



getmonero.org



[/r/Monero](https://www.reddit.com/r/Monero)



monero.stackexchange.com