To Bake or Not to Bake?!

By Adrian Brink

@adrian_brink

A Brief Overview of Cryptium Labs

- Fundamentally a Proof-of-Stake company

- Three main pillars

    - Secure and available Validation

    - Research & Development across networks

    - Community building

- Three co-founders from the blockchain world

How it all started in 2018

- Started to build the Cosmos validator community in late 2017
- Ran more and more testnets and eventually we decided to setup a professional validator
- Setup all physical infrastructure in a Tier IV datacenter in Switzerland
- Tezos launched and we had all this infrastructure ready, so we decided to bake

What do bakers do?!

- Secure the Tezos network

- Participate in governance

- Provide a useful function to network participants

  - Tooling

  - Content

The different levels of baking

Problem Set: *"Secure and available cryptographic keys to provide digital signatures."*

■ Public vs. Private baking

■ Home vs. Redundant baking

Home Setup
- 50GB hard disk
- 16GB RAM
- i5 CPU
- Nano Ledger S
- 5MB/s low latency internet connection

Redundant Setup
- Same hardware specs
- 2N+1 power supply
- 2N+1 cooling
- 2N+1 internet
- Strategies for dealing with hardware failure

Challenges for bakers

- Keep up-to-date with the network developments

- Ensure that you are secure and available at all times

- Crypto-accounting and paying your delegators

- Maintain physical infrastructure

- Increasing your self-bond to cover security deposits

Evaluated Balance ?

174,390.90147 ṫ ($242,961.458)

Staking Balance ?

2,229,052.838714 ṫ ($3,105,517.104)

The evaluated balance is snapshoted during the current cycle and will be use in 7 cycles.This is equal to 222 rolls.

Current cycle

XTZ required

cycle	xtz	cumul.	rolls
34	13.73 Ktꝫ	13.73 Ktꝫ	125 / 41074
35	19.25 Ktꝫ	21.67 Ktꝫ	137 / 41432
36	19 Ktꝫ	27.93 Ktꝫ	137 / 41734
37	22.23 Ktꝫ	38.23 Ktꝫ	150 / 42048
38	24.66 Ktꝫ	50.25 Ktꝫ	167 / 42362
39	30.96 Ktꝫ	67.85 Ktꝫ	204 / 42620

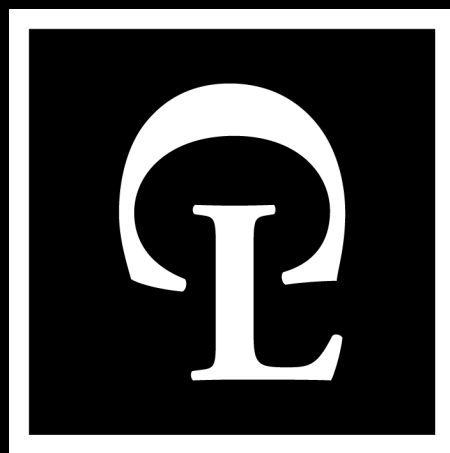Grace Period   Cycle 40

Why run a baker?

- Large potential economic upside if PoS works and wins
- Influence in governance to determine the future of Tezos
- A cool technical challenge

	On-Chain Delegation	Off-Chain Delegation
Initial saldo (XTZ)	100,000	100,000
XTZ EOY	109,847	109,847
Service fee	10%	0%
Revenue after fees (XTZ)	8,861.97	9,847
Maximum enabled on-chain delegation	0	606,060.61
Generated earnings on on-chain delegation	0	59,676.55
Fees from on-chain generated earnings (10%)	0	5967.65
Fees generated by off-chain delegator (50%)	0	2983.83
Total generated earnings EoY (XTZ)	8,861.97	12,830
Difference (on-chain vs. off-chain)		+ 44.78 %

A belief in the benefits that decentralisation enables.

To reach out

- Twitter: https://twitter.com/cryptiumlabs

- LinkedIn: https://www.linkedin.com/company/cryptiumlabs/

- Website: http://cryptium.ch/

- Blog: https://medium.com/cryptium

- GitHub: https://github.com/cryptiumlabs

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