# DATANODES / SERVICENODES AND THE PIGEON SOCIAL DAPP

# Pigeoncoin 2019



## INTRODUCTION

Pigeoncoin advocates the widespread use of strong cryptography and privacy enhancing technologies as a route to social and political change. Built on the foundation of Satoshi Nakamoto's peer-to-peer and permissionless electronic cash system. Pigeoncoin's ambitious and altruistic goal is to apply these same principles to social media through our Pigeon Social DAPP, calling on Pigeoncoin's openly available and fast decentralised data-caching layer platform.

## A PHASED APPROACH

PHASE1 I	MASTERNODES
111/2-1	MASILIMODES

PHASE 2 | DATANODES & SERVICENODES
PHASE 3 | THE PIGEON SOCIAL DAPP
PHASE 4 | DECENTRALISED APPLICATIONS

## FROM MASTERNODES TO DATANODES—A GENUINE USE CASE

Masternodes will be developed into Datanodes to serve our primary use case, while retaining their original intrinsic benefits. They will form the basis of our data-caching layer. Datanode operators will be compensated via the existing block reward mechanism for their hosting and storage costs. The Pigeon Social and other DAPPS will require significant decentralised data storage, redundancy with 24/7 availability, and, Datanodes will serve as their fast data-caching layer.

## **DATANODE PROTOCOL**

Datanodes include all of the enhanced security, features and checks inherited from Masternodes. In addition to the existing proof-of-service, they will be extended to include proof-of-data, this being a peer to peer integrity check. When a Datanode joins the network, a list of active and compliant Datanodes is made available. When a Datanode sends its service messages to the network, it will also perform a random data integrity check with the network. Data is distributed randomly and replicated several times across Datanodes for greater redundancy. Datanode operators do not determine how data is distributed. Encryption will be handled by the DAPPS, allowing them the flexibility to choose their own types and methods.

# SERVICENODE PROTOCOL

DAPPs need to have the ability to run without a centralised server and will use a Servicenode application layer as a fast smart contract API link to pull data from the Datanode Protocol. An example of Servicenode provisioning can be found in Raptoreum. Due to the way Raptoreum's smart contracts are handled, they will not only have a larger allowed size than Ethereum's contracts but also allow a greater variety of programming languages. Scaling issues and large increases in gas tx fees caused by smart contracts being built into core chain blocks are overcome with Servicenodes thus allowing the Pigeon Social DAPP to utilise an asset platform such as Raptoreum in this way.



## PHASED DEVELOPMENT

Once the Datanodes and Servicenodes are completed, development of the Pigeon Social DAPP will also go through several phases.

## PHASE 1: BASIC PIGEON DAPP

Pigeon will launch simultaneously with the Datanodes/Servicenodes in a basic form as a text based proof of concept social platform.

## PHASE 3: MARKETPLACE

With the integration of the wallet complete, the Pigeon Social Marketplace will be introduced to enable quick and easy in app buying and selling of goods and services.

## PHASE 2: SOCIAL MONEY

A fully integrated wallet will be added for sending and receiving funds instantly or purchasing goods and services.

## PHASE 4: ENHANCED FEATURES

The final phase will be adding all the enhanced features. The final Pigeon Social DAPP will be well-polished, intuitive and easy to use.

## **MASTERNODE SPECIFICATIONS**

 COLLATERAL
 I
 TBC (0.2M to 2M range)

 BLOCK REWARD
 I
 TBC (20% to 50% range)

 INSTANTSEND
 I
 YES

 PRIVATESEND
 I
 YES

 CHAINLOCKS
 I
 TBC

## **PIGEON SOCIAL DAPP**

The Pigeon Social DAPP will be free to use and completely free from data collection. It will run on the Datanode and Servicenode decentralised platform with no central server. It will be open source and community run.

## **PIGEON FEATURES**

- Free to use and free from data collection.
- Decentralised, no central server.
- Total control and ownership of your content.
- 30 day default data burn (manual change required).
- Integrated wallet and social marketplace.
- Strong and strict privacy defaults.
- Default opt-out / strictly opt-in marketing platform.
- Data encryption.

## **PIGEON REVENUE MODELS**

To ensure the Pigeon Social DAPP can remain free to use with continued development and support, the following primary sources of revenue will be established.

## OFFICIAL PIGEON MINING POOL

The Pigeoncoin official mining pool will have a 1% mining fee. By mining on the official pool, miners will be directly supporting the Pigeon social network.

## **SMALL TRANSACTION FEES**

Every wallet transaction through the Pigeon Social DAPP will incur a very small transaction fee. These minimal fees help keep the Pigeon Social DAPP free to use and free from data collection.

## PIGEON SOCIAL MARKETPLACE

All purchases made through the Pigeon Social Marketplace will incur a 2% marketplace fee.

# OPT-IN MARKETING PLATFORM

An anonymous, highly targeted, strictly opt-in only marketing platform using a unique marketing identifier without revealing any user data. Privacy of the user, transparency of the advertiser.

## OPT-IN MARKETING PLATFORM

Marketers would be incentivised to perform accurately and honestly. They will be registered on the platform with a public advertiser profile information page, be able to enhance their reputation by adding more information and their ranking will be obtained through community feedback. Content will be matched to categories and checked by opt-in reviewers who will keep content targeted and relevant to user preferences. Content checks will be random and the opt-in reviewers will receive a small amount of Pigeoncoin for their efforts. Marketers who abuse the system will be penalised. Opt-in users can flag content that does not accurately match their preferences and be reviewed by opt-in reviewers. Flagged content is checked and a random sample sent to content checkers to confirm that they agree. Content checkers who consistently perform poorly at reaching majority consensus with randomly selected peer checkers, will eventually be removed. DAPP users will be reminded that they are receiving targeted marketing because they opted-in to the anonymous marketing platform. An example of a category might be Tech > Cryptocurrencies. All that the marketer can do is categorise their content, the DAPP handles everything else.

## A DECENTRALISED FUTURE

With the combined Datanode and Servicenode infrastructure established, the larger open source developer community can leverage both platforms for their decentralised projects, such as truly decentralised exchanges, decentralised email and other decentralised services.