# A general Intro to SkyeKiwi

## Vision

SkyeKiwi is using a combination of various well-developed cryptographic schema to create a solution of securely sharing information in blockchain networks. The capacities of blockchain networks will be significantly enhanced when programable secrets can be processed through a decentralized network. We believe an innovative and unique new economic model will be created when secrets are processed on blockchains.

We also want to be a Polkadot/Kusama parachain to integrate with other blockchains with their unique offerings on DeFi/Storage/Identities/NFTs. Blockchains are not supposed to be isolated or efforts by one single party or company. There are almost always collaborative initiatives by multiple companies who are specialized in different aspects of experience and technology.

### **Products & Use-Cases:**

The core SkyeKiwi Protocol will come with two flavors:

- client-side version for end users to create secrets that can be shared in an open internet.
- system-level version for node operators with specialized TEE hardware to store and operate secrets on a Substrate based blockchain.

So far, we have publicized an early release of the client-side version of the SkyeKiwi Protocol that is capable of processing arbitrary size and type of data on the client and share it with up to thousands of people over a public network. Currently, we are using the Crust Network for storage and the Jupiter testnet by Patract Labs for WASM contract execution.

An application built on top of the client-side version of the SkyeKiwi Protocol KiwiSign is under development. KiwiSign is a decentralized contract signature platform designed with privacy as the first primitives. It features a unique cryptographic tech developed by us called Proof-of-Agreement. We will ship a beta version of KiwiSign in mid-August.

When a blockchain is created that enables secret sharing using a protocol very similar to what we have designed for the client-side, and new use cases and economic model can be created far beyond signing contracts:

- 1. mNFTs for masked NFTs, where the actual content of the NFTs can be managed by creators and owners. It's compatible with existing NFT standards. A subscriber pool can be created with mNFTs. Fans and a creator will enter into a pool of staked assets and later subscriber will forwards a portion of the staked amount to existing pool members and become a member of the pool. Pool members are behind the pay-wall of private content of the creator and are authorized to place bids to purchase the creator's mNFTs. Naturally, the fans have incentives to promote their staked creators and receive economic benefits by doing so.
- 2. Fiat currency & real-world assets management through Smart Contracts: with the client-side version of the SkyeKiwi Protocol, users can securely share their bank information with the blockchain and assign designated processor to process these requests, with the addition of blockchain level enabled secret sharing: blockchains nodes can process fiat payments and automatically release the purchased cryptocurrencies. Besides ordinary user on-boarding, such capacities can also enable traditional funds or DAOs managing fiat currencies to take advantage of decentralized governance and the ease of auditing by blockchains.
- 3. Cloud resource control plane: the ability to dynamically allocate cloud computing resources globally through smart contracts. Cloud computing resources are a highly monopolized market with extremely high margins and an unfair pricing schema for smaller teams. For instance, on AWS, a 3-year reserved cloud VM is about 70% cheaper than on-demand pricing. Resellers can sell these resources at a lower price and charge a small margin for users. When we are capable of creating a fair market for these resources, smaller

teams and resellers can benefit a lot. Also, empowering users to launch ephemeral functions, containers, or even VMs for un-deterministic jobs through smart contracts is powerful and will further extend the capacities for blockchains.

- 4. KYC as a service: one or an array of KYC providers can create a DAO to issue KYC. When SkyeKiwi becomes a parachain, such KYC data can be accessible by all chains and DApps in the Polkadot ecosystem for a fee charged by the KYC DAO. So that, for regular users, one KYC is sufficient to be used anywhere.
- 5. **Machine learning model marketplace**: trained machine learning models can be stored as secrets on the SkyeKiwi Blockchain and accessible by others by smart contracts.
- 6. Credential Marketplace: trade or rent credentials to various Web2.0 services.

Beyond the core products we are offering: we are also working with the Kusama Treasury council to develop a cross-chain naming service for the Polkadot/Kusama ecosystem. For instance, when the name "skyekiwi.dot" is bond to an address on Polkadot, while "song.ksm" is bond to an address on Kusama, to send assets cross-chains: one can simply use "skyekiwi.dot >> song.ksm". We will not make this a for-profit program but as common goods that will be merged onto the Substrate code base.

## **Tractions**

- 1. We are a grant receiver from the Web3 Foundation for an experimental password manager (called SkyePass) built on top of the SkyeKiwi client-side protocol.
- 2. We won the third place with SkyePass by a hackathon organized by Parity Asia.
- 3. We have released an early working version of the SkyeKiwi client-side protocol, sponsored by the Crust Network.
- 4. We have won the first place with the client-side SkyeKiwi Protocol and KiwiSign by a hackathon organized by the Web3 Foundation and received

- shout-out by the Polkadot official Twitter account.
- 5. We are contacted and invited to take part in many accelerator programs like the Arweave Foundry program and the Substrate Builders Program.
- 6. We are in process of talking with the Kusama Treasury council to push through a secure and generalized common-good naming service for the Polkadot/Kusama community.
- 7. We are 70% done with a technical whitepaper of the SkyeKiwi Blockchain that featuring secret smart contract execution and frequent key rotation with maximum protocol efficiency; 40% done with the economic whitepaper for the SkyeKiwi Blockchain featuring an economic model with data ownership and privacy built-in.
- 8. We have achieved all of these things with one full-time founder and one parttime founder. Right now, we have a dozen of to-be-hired engineering and operation candidates currently in the interviewing process.

# Roadmap

July, 2021

- Modify the client-side SkyeKiwi Protocol so it can work in browsers
- On-board EVM smart contract platform partners to deploy KiwiSign to mainnet
- Launch an invitation only testing version of KiwiSign on testnet
- Publish the first version of the SkyeKiwi Blockchain whitepaper
- Work with the Kusama Treasury Council on Polkadot Naming Service
- On-board one or two more front-end, full-stack engineers and two operation/other specialists
- Participate in the Arweave Foundry Program
- Interview with the Substrate Builders Program
- Prepare media coverage for KiwiSign

Various AMAs/Interviews with multiple media partners

#### August, 2021

- Public launch of KiwiSign & Publications
- Limited version of the Polkadot Naming Service as a Substrate pallet with client side resolver.
- A simple IPFS pinning service for IPFS reliability before content gets fetched by the Crust Network
- Integrate the naming service to KiwiSign to enable public key lookup by naming.
- On-board two blockchain engineers and get ramped up with the development of the SkyeKiwi Blockchain
- Customized consensus pallets of the SkyeKiwi Blockchain on the Substrate side
- Native Meta-transaction pallet for the SkyeKiwi Blockchain
- Access and work on the validator network of the SkyeKiwi Blockchain
- External audit on the SkyeKiwi client side protocol
- Interviews/Talks/AMAs on use cases of the SkyeKiwi Blockchain
- Structure a grant/developer incentive program for the SkyeKiwi Blockchain

#### September, 2021

- MVP version of the TEE environment for semi-secured processing secret databases and consensus communication with the main-GPoS blockchain.
- Start to work on a modified version of the contract module to redirect secretrelated requests to the TEE environment
- Start to work on a modified version of an AssemblyScript based eDSL for WASM smart contract fore-ground language for the SkyeKiwi Blockchain based on Ask! developed by Patract Labs

- Implement and test an early version of the customized gas calculation, secret keeper nodes election, and staking rewards distribution model
- Specification freeze for the testnet launch of the SkyeKiwi Blockchain
- XCM enabled Polkadot Naming Service & deploy to testnets of partnered Substrate based blockchains
- Design and creator on-boarding for Metastable, the mNFT platform powered by the SkyeKiwi protocol

#### October, 2021

- IDO preparation for a ERC20 version of the native token of the SkyeKiwi Blockchain
- Feature freeze for the SkyeKiwi Blockchain testnet v0.1
- Register the new blockchain with multiple Polkadot ecosystem companies (i.e. subscan, dotapps, etc.)
- Private sales of the ERC20 version of the native token on the SkyeKiwi Blockchain (the "SK" token)
- on-board 1 more blockchain engineer and 1 support engineer for the development of the SkyeKiwi Blockchain
- Plans for early validators and secret keepers rewards.
- publication and media coverage prep for the test-net launch
- Expose the ability for users to build customized resolvers in WASM smart contract of the Polkadot Naming Service by exposing APIs as a chainextensions
- Internal Auditing of the testnet code base

#### November, 2021

- SkyeKiwi POA testnet launch
- Public sales of the SK Token

- Tweaking parameters of the economic model of the SkyeKiwi Blockchain testnet
- Prep for parachain auction and plans for crowdloan incentives
- More engineers onboarding
- On-board 3-5 more people (operation/marketing/other) to manage publication content, partnerships, and communities.
- Launching the SkyeKiwi Developer Incentive & Grant Program
- Roll out the "contract template" to generate common and simple contracts effortlessly on KiwiSign.

#### December, 2021 - February, 2022

- Specification Freeze for the SkyeKiwi Mainnet Launch
- Roll out Metastable Arts with collaboration with some awesome creators
- Explore and start working plans for one or more major use cases of the SkyeKiwi Blockchain
- External auditing & security review for the SkyeKiwi Blockchain code base
- Start the first rounds of secret slots auction of the SkyeKiwi Blockchain