Bondpaper v1.4.6

20-Nov-2020

Abstract

The simplest transaction involves the direct exchange of cryptocurrencies between two parties. Referred to as an OTC trade, an estimated USD 20 billion daily[1] is transacted in this way in bitcoin alone. However, there exists no standards or best practices that govern how OTC trades are performed. For institutional investors, centralized entities can help broker these transactions at great expense and without anonymity. For the average investor, the process is cumbersome, but worst of all, requires a high degree of trust, and subjects both parties to significant risk.

The issue of trust extends to marketplaces that sell digital goods and services in exchange for cryptocurrency. Current crypto solutions are targeted only at the point-of-sale, but don't address buyer and seller protections. Traditional marketplace providers can handle the sale of physical items, but have yet to solve the simple exchange of digital goods. Together these issues result in a large market gap for the exchange of digital goods and services using cryptocurrencies.

Bondly solves this issue through the creation of decentralized financial (DeFi) applications powered by a cross-chain swap architecture and novel token-powered escrow platform.

Background

No OTC Trade Standards

OTC trades are performed by two parties that wish to exchange one cryptocurrency for another, or with fiat. [2] They are typically performed by parties who wish to remain anonymous, or who have a significant amount of capital to exchange or both. A decentralized exchange (DEX) can allow for the anonymous exchange of cryptocurrencies, but this is generally limited to tokens operating on the same blockchain, typically Ethereum. Furthermore, liquidity is generally an issue[3] because they are less widely used and somewhat cumbersome to operate. A centralized exchange allows for the exchange of cryptocurrencies operating on different blockchains, but due to regulatory scrutiny, require detailed knowledge of all customers, while subjecting its user to a greater range of threat vectors such as hacks[4]. Furthermore, large orders can result in significant slippage resulting in less-than-ideal price execution[5]. Workarounds are typically very risky, sometimes involving a face-to-face meeting

[1] How Does A Bitcoin Over the Counter (OTC) Market Work? [Explained] , K. Shilov, 2020
[2] Crypto OTC Trading, Explained, E. Bradley, 2019
[3] Solve the Liquidity Challenge of Decentralized Exchanges, L. Luu, 2017
[4] The Coincheck hack and the issue with crypto assets on centralized exchanges, Reuters, 2018
[5] Why the GDAX Ether Flash Crash Isn't Surprising, and What It Means for Crypto, Omega One, Consensys, 2017

with a complete stranger with no guarantee of completing a successful transaction. These too carry significant premiums, and are generally not scalable for large orders.

Purchasing Digital Goods Online is Risky

The concept of what a digital product is has changed significantly with each passing year. In ten years, offerings in the digital products space have grown from USD 0.99 song downloads to million dollar social media accounts.[6]

Today the marketplace for digital goods is growing exponentially. According to a study published by Fiserv in the summer of 2019, some 74% of online purchases are for digital goods as opposed to physical[7]. Statista estimates that the digital commerce segment, defined as *all consumer transactions made via the internet related to online shopping for products and services*, is valued at USD 2.92 trillion in 2020[8]. This would mean that a staggering USD 2.16 trillion in estimated online purchases were for digital goods and services in 2020 alone. Furthermore, the digital commerce segment is estimated to grow by 40.5% by 2024.

Despite this, the marketplace for buying and selling digital goods and services is highly fragmented, and operated exclusively by centralized intermediaries. While some of these entities are trustworthy, others may not be. Furthermore, the extension of trust must be made all the way to the buyer and seller. Beyond the risks associated with this, the fees can be expensive, as the centralized intermediary holds considerable leverage.

Large online marketplaces at least try to offer buyer protections. Alibaba provides Trade Assurance or AliExpress Buyer Protection. EBay, the largest global auction marketplace, offers its Money Back Guarantee policy. However, both protection mechanisms exclude coverage for the sale of digital content, intangible goods, services or websites[9,10]. Furthermore, both do not support the use of cryptocurrencies[10,11] and there appears to be no near-term changes to this policy.[12]

Despite the rapid growth and scale, at the moment there is no reliable, decentralized, peer-to-peer marketplace for the purchase and sale of digital goods, let alone ones that support cryptographically-secured payment methods.

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[6] Calgary man's meme page part of US$85 million sale to Warner Music Group, Calgary Herald,, 2020
[7] From Rideshare, Music Streaming, And Food Delivery: The Global Rise Of Digital Goods And Services, Forrester, 2019 f
[8] Statista, Digital Market Outlook, Digital Commerce, Worldwide, 2010
[9] eBay Money Back Guarantee policy, ebay.com, 2020
[10] AliExpress Buyer Protection Overview, aliexpress.com, 2020
[11] eBay Payment methods policy, ebay.com, 2020
[12] EBay Denies Rumors It Will Start Accepting Crypto, Despite Advertising at Crypto Event, T. Simms, 2019

BONDSwap

Bondly is solving this through the creation of a decentralized cross-chain swap architecture that is fully atomic called BONDSwap (BSWAP). BSWAP allows parties to perform cryptographically-secured OTC trades of cryptocurrencies running on completely different blockchains. While atomic swaps across blockchains of differing native architecture have occurred, to-date they have not scaled similarly with the DeFi movement due to the highly-technical and specialized knowledge required. Furthermore, the current method of retaining atomicity between cryptocurrency pairs requires a very specific interoperability topology, one that is specific to each implementation.

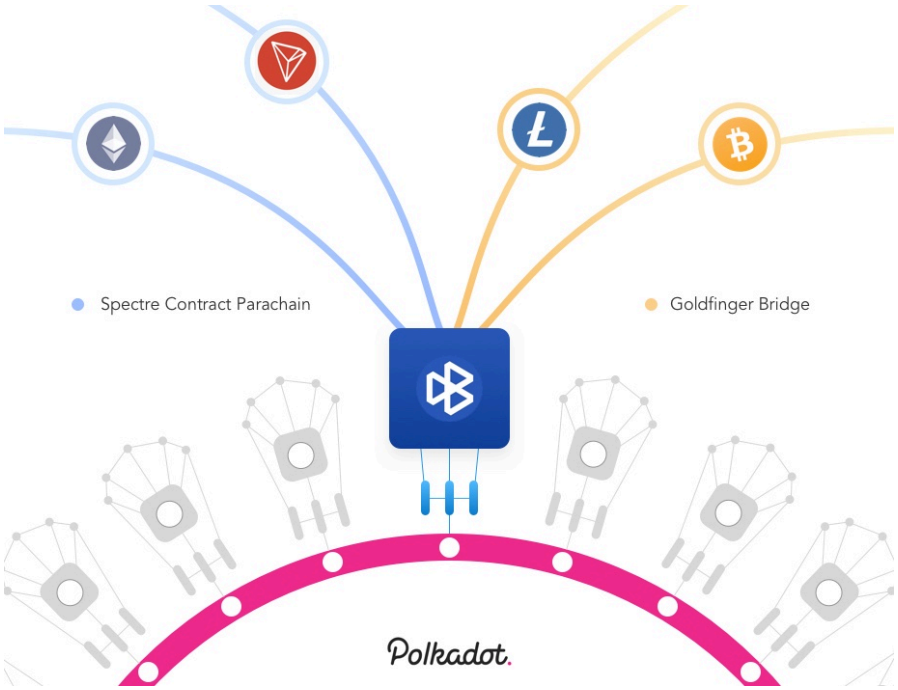


Figure 1 – BSWAP leverages Polkadot to enable cross-chain interoperability, while assuring a cryptographically-secured, fast -finality architecture

BSWAP provides simplified multi-chain interoperability by implementing Polkadot's relay chain to listen in on blockchains of differing native architecture through the use of Polkadot's *bridges*[13]. BSWAP will utilize *bridge modules* to construct system-level virtual parachains for non-turing complete blockchains such as Bitcoin, Litecoin and other Bitcoin forks. *Bridge contracts* will be implemented for all other compatible chains to enable smart contract interoperability. Through this architecture, Bondly can be aware of the state of two separate chains and perform against an instruction set based on set conditions. For example, if Alice wishes to exchange her bitcoins with Bob's Ether, she can send these bitcoins to an address

[13] Polkadot Wiki, Learn Bridges, Polkadot, 2020

supplied to or designated by BSWAP. Meanwhile, Bob will send his Ether to the BSWAP smart contract. BSWAP verifies the bitcoin was received at the designated address, and releases the Ether held in the BSWAP contract to Alice's Ethereum wallet. Same-chain swaps are also performed efficiently and effortlessly by bypassing the relay chain and operating directly through smart contracts. All of this occurs in a programmatic, automated and decentralized manner.

This architecture enables BSWAP to realize the following:

1. Decentralized OTC trades with cross-chain interoperability
2. Guaranteed price execution with no risk of slippage

BSWAP is a product of the Bondly Protocol which simultaneously powers the Bondly User Interface (web-client and mobile application). As a result, the entire transaction can take place in Bondly's secure web-client or mobile application, with the input of just a few fields of information. Furthemore, BSWAP can be made to generate a web link that can be shared with another user over secure chat, email or any other form of communication to simplify the intent to perform an OTC trade.

BOND DEX

Because of our novel cross-chain architecture, Bondly can provide a fully decentralized exchange that is blockchain agnostic. Users can anonymously swap cryptocurrencies operating on different blockchains seamlessly, by leveraging the BSWAP architecture operating on the Bondly Protocol.

BOND DEX will feature liquidity pools that are pegged to their corresponding market values using our automated liquidity engine. Liquidity pool smart contracts will be supplied market prices through our Oracle service partners such as DOS Network[14]. The Bondly Protocol can instruct the BOND DEX hot wallets on non-turing complete blockchains to lock or release funds, while providing a corresponding instruction to smart contract supported blockchains. Initial support for distributed ledgers that do not have a globally defined state or transactions such as IOTA or NANO will be limited. However, due to cross-chain interoperability, BOND DEX presents an innovative approach to the current DeFi token swapping model by offering pairs not currently supported by existing DeFi projects, such as native BTC/ETH pairs without using a wrapped ERC-20 bitcoin derivative.

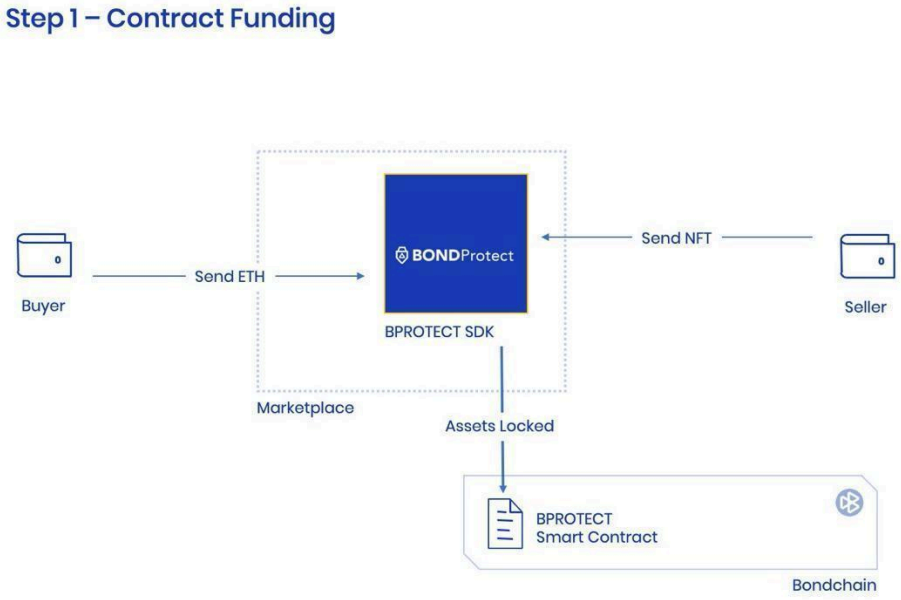
[14] Official Partnership Announcement: Bondly and DOS Network, DOS Network, 2020

BONDProtect

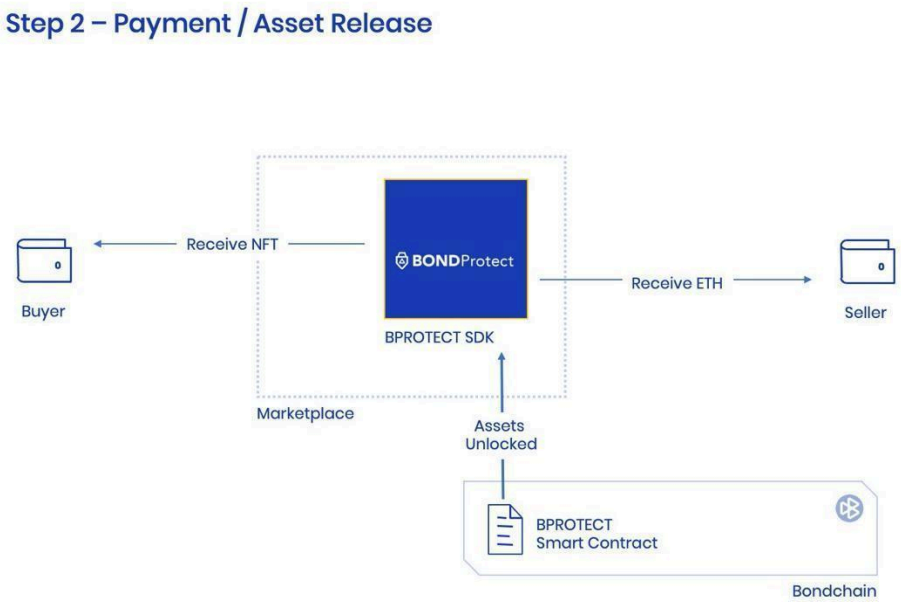
BONDProtect (BProtect) is a smart contract based marketplace payment platform designed to make the buying and selling of any good or service easy and protected. It offers a more robust set of capabilities that include escrow, recurring payments, and payment protection. It can be used as an individual merchant to sell digital products using the BProtect GUI or integrated into any online marketplace as a payment method comparable to other services like Paypal and Stripe. The core capability of BProtect focuses on purchase, sale and transfer of digital assets including cryptocurrencies, non-fungible tokens (NFT) and more. This makes selling things like making OTC deals with assets not on hand, monthly subscription services, and high priced digital goods easier for the merchant to sell and safer for both sides. It supports all BSWAP cryptocurrencies and is powered by the same base Polkadot technical architecture meaning all bridged infrastructure assets would be available for use.

BProtect is designed to be used by existing marketplaces as a third-party integration service packaged as an SDK. It allows the marketplace to easily integrate BProtect as part of their infrastructure and set their own deal fees without having to maintain custody of cryptocurrency themselves, with a much lower fee to buyers when compared to other payment options.

Example: Using BProtect to sell NFTs with Escrow



As a buyer submits cryptocurrency for payment, it is held in its native blockchain BProtect escrow account. At the same time, a seller can transfer their NFT to its native blockchain BProtect escrow account (can be the same smart contract if operating on the same blockchain as per the above diagram).

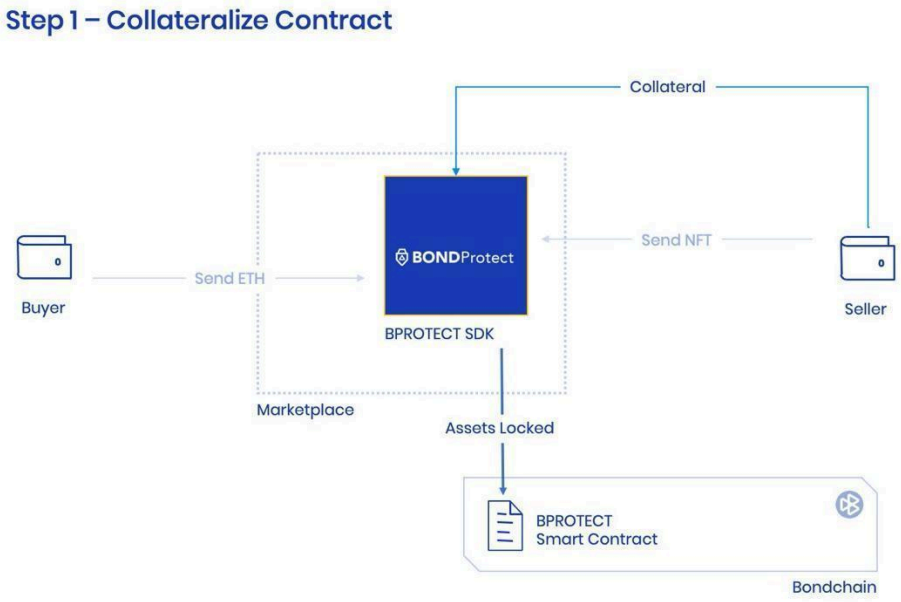


Bondly

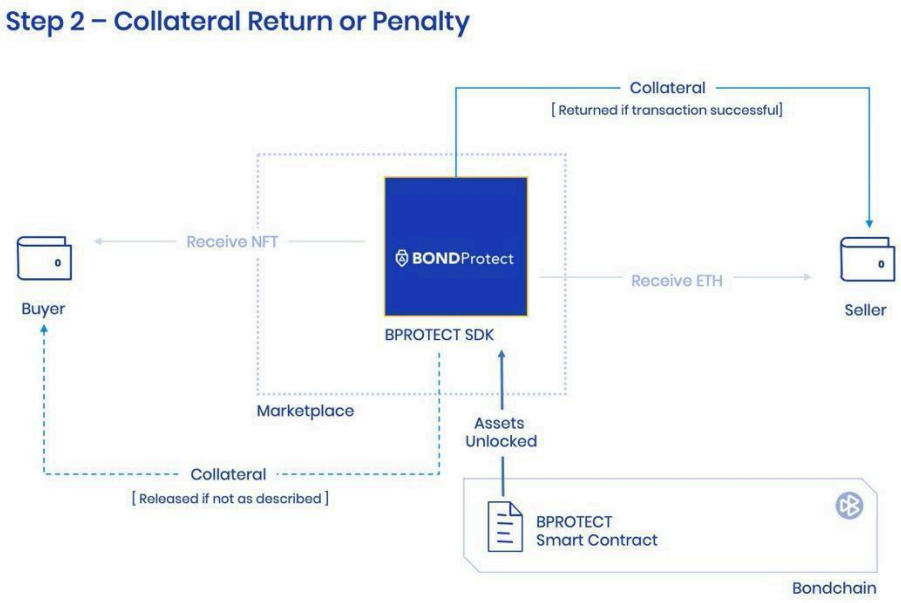
Once the sale conditions have been met and both parties sign off on the transaction, the NFT is released to the buyer's wallet, while the cryptocurrency payment is simultaneously transferred to the seller's wallet.

BProtect is designed to be expanded upon and enhanced. For example, the platform would allow for integration with third-party service providers such as KYC/AML providers, validators to confirm the integrity of the digital good, or Oracle services to handle the transfer of off-chain digital assets like software, credentials, data files, etc.

Seller Collateral and Transaction Arbitration



Without defining the specific future use-cases, BProtect includes a secondary protection mechanism in the form of an optional collateral posting requirement by sellers. Bondly recognizes that there may be any number of use-cases where the simplified escrow of on-chain assets like cryptocurrencies and NFT's may not fulfill all marketplace requirements, especially for those digital or virtual goods that only exist off-chain. Marketplace participants may agree on the requirement for a seller to post cryptocurrency as collateral for a transaction, to discourage malfeasance.



Should a dispute arise from a misrepresentation by the seller, the transaction can be escalated up to a third-party arbiter. If the arbiter rules in favor of the buyer, the buyer's funds are returned, and the seller forfeits their collateral as a penalty. Using this mechanism, any number of additional transactional uses cases can potentially be resolved. For example, partial delivery against an agreement might result in the release of a portion but not all of the escrowed payment, or if a buyer is found to be abusing the arbitration system in an attempt to back out of a transaction after receiving verified digital goods, their escrowed funds would be transmitted to the seller.

Fully-Transparent Transaction History

Beyond the escrow of funds and digital assets, BProtect provides an additional layer of transparency by publishing a history of all transactions on Bondchain. In this way, marketplace buyers and vendors can optionally build an auditable track record of successful transactions, while still retaining complete anonymity. This information can be used in conjunction with the seller collateral service, to raise or reduce the ratio of collateral required based on the seller's historic performance.

The buyer and seller can further input any number of additional contract conditions, such as an evaluation period to enable verification of digital goods.

Bondchain and BONDLY

The Bondly token (BONDLY) is an ERC20 token issued on the Ethereum Mainnet with a total fixed supply of 1,000,000,000 (1 billion) tokens. BONDLY will be supported natively within the Polkadot ecosystem and Bondchain will be listed as a candidate for a parachain slot within Polkadot. Total supply of BONDLY will remain the same across all infrastructure.

Staking Contracts will be deployed on both chains to enable participation by marketplaces, DEX users, and token holders.

Total allocation is as follows:

- 222,620,759 (22.26%) BONDLY will be allocated to community bonding events
- 170,000,000(17.0%) will be vested long-term by team members (see 'Other Allocations' table below for vesting)
- 186,000,000(18.6%) will slowly vest over 36 months and be used to strengthen the Bondly ecosystem
- 5,000,000(0.5%) will be used within liquidity pools and DEX such as Uniswap on release
- 400,000,000 (40%) tokens will be used as network participation rewards by staking and providing liquidity
- 16.379m (1.64%) BONDLY tokens will be burned shortly after the Token Generation Event (TGE)

Token Community Bonding and Distribution

The Bondly community bonding will occur in five (5) separate tranches, each with specific percentage allocations, token values, and vesting schedules as per the below. Each round is capped to a maximum number of tokens. There is no soft cap. Contributions will be accepted in (Polkadot) DOT, stablecoin, and major cryptocurrencies. The complete list of supported tokens will be provided at a later date.

Bonding Round	Total %	Tokens Sold	Token Price	Full lock duration (months)	# of Releases	First Month Unlock Rate	Subsequent Month Unlock Rate
Seed	4.13%	41,250,000	0.00400	3	9	0.00%	11.11%
P1 (strategic)	9.00%	90,000,000	0.01150	0	5	20.00%	20.00%
P2	7.45%	74,482,759	0.01450	0	4	25.00%	25.00%
Pre-Offering	0.58%	5,750,000	0.02000	0	3	50.00%	25.00%
Public Offering	0.36%	3,638,000	0.02500	0	1	100%	0.00%

Bondly Collectible Card Game (BCCG)

BCCG is a fully digital, NFT based, collectible card game that adds immense utility, educates about our product family, and incentivizes gamers to participate in our ecosystem. A total of 7,500,500 (0.75%) BONDLY tokens will be allocated towards rewards for BCCG holders (see 'Other Allocations' table below for vesting schedule). With the introduction of BCCG there will be a burn of approximately 16.379m (1.64%) BONDLY tokens from the total supply of BONDLY tokens.

Initial DEX Offering

Tokens in the round called 'Initial DEX Offering' will be issued in a fully autonomous and decentralized manner through the use of a smart contract based DEX. This enables tokens in this round to follow a predefined price curve. Instead of setting a fixed price determined by the team, the bonding curve allows the contribution to respond fairly to supply and demand while setting its own market price. Participants in this round can participate in the contract pool by entering and exiting as they see fit.

Bondly intends to set a minimum range of USD 0.025 on the curve. This contribution round will conclude once all tokens have been allocated to participants, or at the expiration of the round period. After this, tokens can be exchanged on other DEXs.

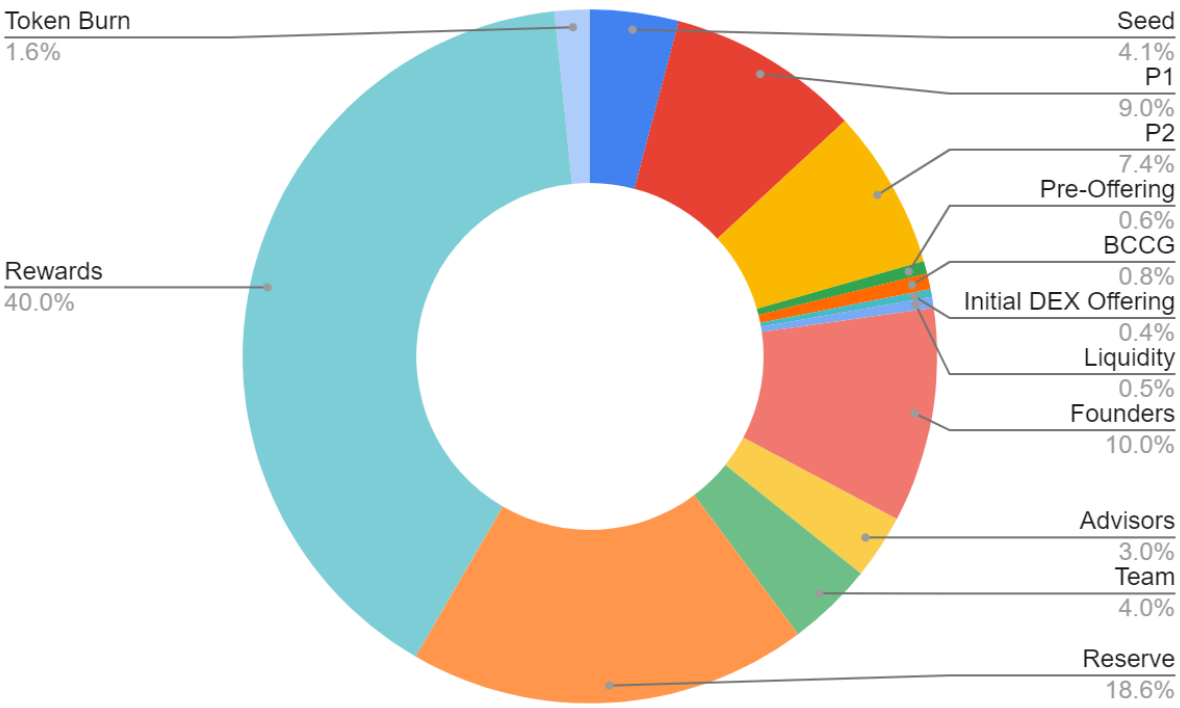
The total contributions accepted on all rounds prior to the initial DEX liquidity offering is expected to be approximately USD 2.61 million.

Other Allocations

The following is a detailed list of Other Allocations

Type	Total %	Total Tokens	Full lock duration (months)	Release duration (months)	First Month Unlock Rate	Subsequent Month Unlock Rate
Founders	10.00%	100,000,000	12	12	0.00%	8.33%
Advisors	3.00%	30,000,000	12	12	0.00%	8.33%
Team	4.00%	40,000,000	12	12	0.00%	8.33%
Reserve	18.60%	186,000,000	0	36	2.78%	2.78%
DEX Liquidity	0.50%	5,000,000	0	0	100.00%	0.00%
BCCG	0.75%	7,500,000	0	3	50.00%	25.00%
Staking Rewards	40.00%	400,000,000	0	0	0.00%	0

The entirely of the token allocation is represented in the chart below:



BONDLY Staking

Subsequent to the aforementioned token sale rounds, BONDLY can be obtained through secondary market purchase or through our token staking program. 400,000,000 (40% of total supply) tokens will be reserved for rewards to BONDLY token stakers.

The following activities result in an allocation of the BONDLY token through staking:

1. BONDLY liquidity pool contributions in our DEX, beyond any earned pool fees
2. BONDLY held in Bondly platform ERC-20 staking wallets
3. BONDLY held in Bondly platform native Bondchain staking wallets
4. BONDLY held by marketplaces and their participants

The Bondly team expects to announce future staking options as the platform evolves.

Why Polkadot

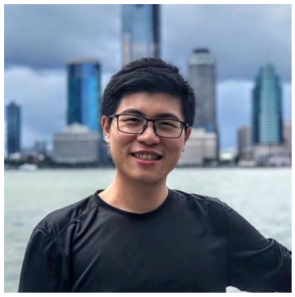
Polkadot represents an important evolution in the interoperability of blockchain technologies. Pioneered by Gavin Wood, co-founder of Ethereum, and founder of smart contract programming language Solidity, Polkadot represents the first complete ecosystem of components to enable true cross-chain interoperability, while providing the greatest possible flexibility and customization for blockchain projects. Amongst its important features are:

- Customizable governance
- Customizable block production
- Shared security from Polkadot relay chain
- Ability to exchange information and assets between parachains
- Proven cross-chain interoperability
- NPoS implementations with very fast finality
- Cost savings (free) to implement smart contract functionality

Bondly is not a core blockchain infrastructure platform nor does it intend to develop new distributed ledger technologies. Bondly is a finance infrastructure solution that operates on top of existing blockchains that is designed to offer maximum value to consumers and institutions. Polkadot has solved the problem of infrastructure in the context of Bondly's product, and that Bondly represents the ideal use case to leverage the technologies offered by its platform.

Team

Brandon Smith
CEO



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The information contained in this Bondpaper about the proposed business opportunity is not intended to be the only information on which a decision is to be made and is not a substitute for a disclosure document, or any other notice that may be required under law. Detailed information may be needed to make a token participation decision;

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Value Risks

Tokens issued by Bondly may drop substantially in value, or may remain illiquid for long periods of time or indefinitely. Bondly cannot guarantee an active secondary market for the exchange of tokens purchased in the token sale. Not all disclosures or statements are being

made in this disclaimer section. Participants should review the token sale agreement in its entirety and seek the professional advice of legal counsel and investment professionals.

BONDLY tokens may change in value based on a number of factors that are outside our control. There is no guarantee or expectation that BONDLY tokens will increase in value, provide a return, or have sufficient adoption and liquidity on exchanges. Owning these tokens does not constitute a share of equity or ownership in the company. The token economy is new and exciting. Regulatory circumstances may require that token mechanics be changed or altered.

BONDLY tokens do not have any rights, uses, purpose, attributes, functionalities or features, express or implied, including, without limitation, any uses, purpose, attributes, functionalities or features on the BONDLY platform. Company does not guarantee and is not representing in any way that the BONDLY tokens have any rights, uses, purpose, attributes, functionalities or features. BONDLY tokens may have no value. The company reserves the right to refuse or cancel BONDLY token purchase requests at any time at its sole discretion.

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