Whitepaper: Router Protocol

The Future is Exciting. The Future is Router.

Vision

To achieve a multi-blockchain future empowered by a completely secure, seamless and scalable cross-chain liquidity protocol.

Mission

In what is clearly looking like a multi-blockchain future, we are committed to building a bridging infrastructure that facilitates seamless flow of liquidity across blockchains.

- An infrastructure that allows for a range of use cases that leverage and extend the composability of DeFi across various blockchains.
- An infrastructure that promotes liquidity migration and developer efforts towards various emerging chains and solutions.
- An infrastructure that eventually leads to a thriving, bustling blockchain ecosystem.

Overview

Current Landscape

With a market capitalization of over $2 trillion, the global crypto ecosystem comprises over 6,000 cryptocurrencies that currently operate in restricted, isolated infrastructures, unable to access neither the liquidity nor the functionality offered by each other. Protocols and communities across the entire industry are continually striving to claim the top spot in the emerging Web 3.0 paradigm. And while the rise of Web 3.0 is inevitable, it’s still too early to tell what the ecosystem will look like — will it grow into a monopoly, with the entire space dominated by a single blockchain platform such as ethereum, or will it turn into an oligopoly, where a handful of protocols control the market?

Challenge

The crypto industry was built on a fundamental premise; the fragmentation and limitations endemic to traditional finance needed to be replaced with a better, more robust system with user needs at the heart of it. The world of traditional finance, while dealing with a wide variety of asset classes, is a deeply flawed one — the limitations it essentially put upon itself do more to facilitate rent-seeking behavior than actually benefiting its users. Unfortunately, several of these legacy encumbrances have been grandfathered into our new world of blockchains and DeFi.

Motivation

The market is littered with fragmented liquidity pools and creating the infrastructure that bridges the gap between them is becoming increasingly important. With over 6,000 different cryptocurrencies on the market encapsulating trillions of dollars in value, there has never been a more pressing need for porting liquidity across them. As more institutional investors join the crypto space, the need for better efficiency and flexibility increases almost exponentially. At router, we believe that the crypto industry doesn't have to suffer from the fragmentation seen in traditional finance.

Solution

To combat the aforementioned challenges, we, at Router, are building a suite of cross-chain liquidity infra primitives that aims to seamlessly provide bridging infrastructure between current and emerging Layer 1 and Layer 2 blockchain solutions. Aside from connecting blockchains and enabling a free flow of information, Router will also make smart order-routing possible, enabling users to swap their assets from different networks seamlessly.

Glossary

Composability - The ability to use existing components and resources as building blocks for new applications

Liquidity pool - A smart contract that consists of locked tokens to ensure liquidity for decentralized trading

Web 3.0 - Third generation of internet services built on top of technologies like edge computing, machine learning and decentralized data networks with the aim to make the internet more open and trustless

Layer 1 - Base layer blockchain architecture, eg. Bitcoin, Ethereum

Layer 2 - Off-chain network lying on top of the base (layer 1) blockchain, eg. Plasma for Ethereum, Lightning Network for Bitcoin

Smart order-routing - Automated process that uses a set of preset conditions to determine the best available opportunity among a set of several trading venues

Turing-complete blockchain - Allows the deployment of smart contracts that can implement sophisticated logic to perform virtually any task (given enough time and processing power)

Trustless system - A system that does not require its participants to know or trust each other

Proof of Stake (PoS) - A distributed consensus mechanism wherein the mining power afforded to a person is in proportion to the stake that person holds in that chain

Stablecoin - Cryptocurrencies that peg their value to an external asset (like the U.S. Dollar or the price of gold) and are generally more stable than other cryptocurrencies

Automated Market Maker (AMM) - A DEX protocol that uses liquidity pools to facilitate the trade of assets in a permissionless and automatic way

Decentralized Autonomous Organization (DAO) - An open source blockchain protocol devoid of any central government and instead governed by a set of rules put in place by its members

Slippage - Difference between expected and actual price of the trade

R.USDC - A token given to the user by Router as proof against the actual USDC tokens (akin to LP tokens given on UniSwap)

RUSD - Router's version of the USDC token which is pegged against the USDC token in the ratio 1:1

Acronyms

DeFi - Decentralized Finance

DEX - Decentralized Exchange

DAO - Decentralized Autonomous Organization

XCLP - Cross-chain Liquidity Protocol

AMM - Automatic Market Maker

PoS - Proof of Stake

BNC - Binance Smart Chain

QoE - Quality of Experience

Introduction

The onset of Ethereum has been nothing short of revolutionary for the world of DeFi. Ethereum is the first Turing-complete, trustless blockchain of its kind. It has revolutionized the concepts of digital money, global payments, and applications. However, with all its benefits, Ethereum network has suffered from scalability and congestion issues, putting billions of dollars in locked value at risk. Ethereum's second iteration, Eth 2.0, is set to transition the network to a proof-of-stake (PoS) system that would, in theory, solve this problem. However, Ethereum's full transition to PoS is still months, and possibly even years away. In the meantime, most major blockchain solutions offer tps (transactions per second) figures far less than that seen on Visa, Mastercard or PayPal, which are at least 1500 tps, even from a conservative standpoint. Even with its transition to PoS, there is no provision, at least for the time being, to combat the issue of high transaction fees in the Ethereum network. The concomitant fees in the Ethereum network make it impossible for the small players to trade, even large players may find the fees to be too much. With the rising ETH price and the increasing network activity, paying more than $10 for simple transactions is too expensive.

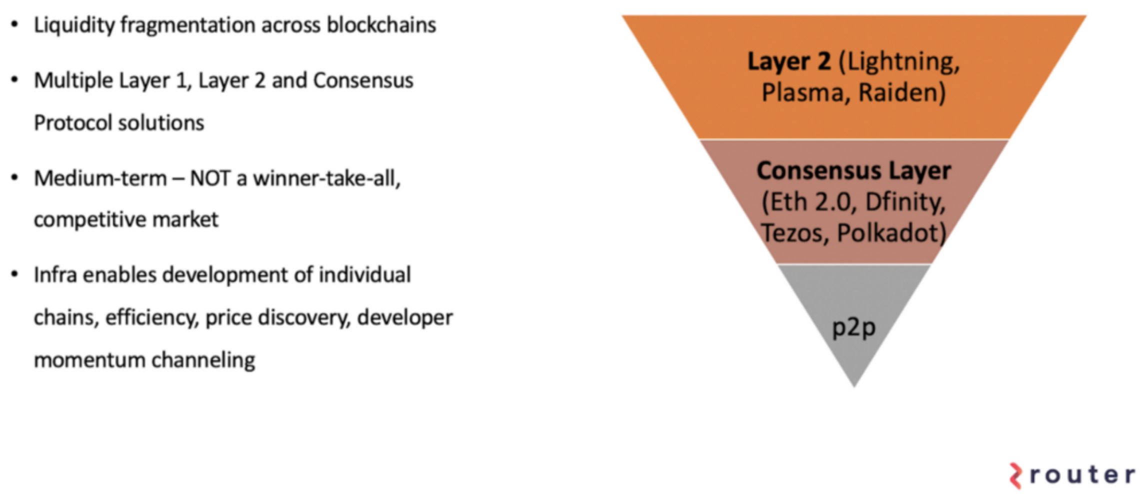

Fig. 1: Current solutions to ethereum's scalability concerns

In recent years, multiple efforts have been addressed towards these issues. In addition to Eth 2.0, there are consensus protocol approaches such as Dfinity, Tezos, Polka and Cosmos that aim to combat ethereum's scalability concerns. At the same time, there has been an influx of Layer 2 solutions such as Matic, Omisego, xDAI which not only intend to solve the issue of scalability, but also aim to solve the cost issues in the prevalent ethereum network. There is no one conclusive winner yet, and it might be that the future of blockchains will be multi-chain for quite a while, with a fragmented market with liquidity and developer community dispersed across these.

In this scenario, what will be needed is an infrastructure that will seamlessly port liquidity between these isolated liquidity pools, almost like highways connecting far-flung cities. The development of railways starting in the early 1800s helped develop the US economy and laid foundations for it to become the superpower of the

20th century; This also led to the development of various cities across the United States. Similarly, cross-chain bridging infrastructure will help promote liquidity migration and developer efforts towards various emerging chains and solutions, and eventually lead to a thriving, bustling blockchain ecosystem.

To this end, we introduce Router, a Cross Chain Liquidity Protocol (XCLP) that acts as a bridging infrastructure to allow contract level data flow across various blockchains, thus enabling asset level data transfer with stablecoin being the medium of value transfer.

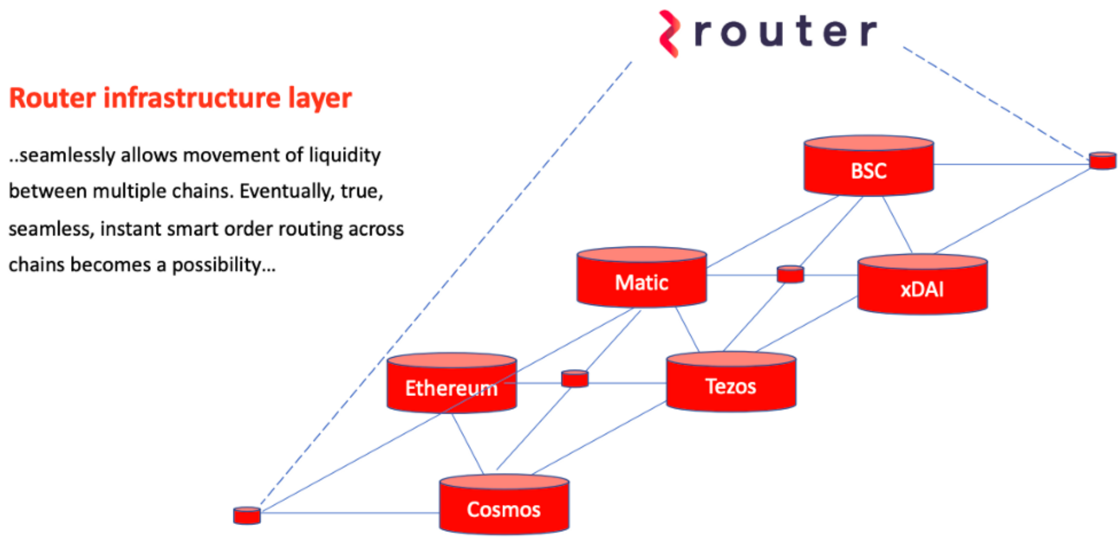

Fig. 2: Router as a bridging infrastructure between Layer 1 and Layer 2 blockchain solutions

Architecture

Router Protocol's architecture consists of two major components:

1) **ParaRouter:** Every chain that is supported by Router Protocol will have a router contract known as ParaRouter deployed on it. The ParaRouter is able to lock a stablecoin and broadcast an event that can be picked up by the listener associated with Central Route to take action.

2) **Central Router:** It is the hub that listens to the event on ParaRouters, validates them, and forwards the event for further processing to the destination chain. Central Router will have multiple validators (a.k.a. relayers) who will need to be approved initially by an authority. However, the validator selection process in itself will be completely decentralized by using their performance as a yardstick. The $ROUTE tokens collected from the users will be used to incentivize the validators.

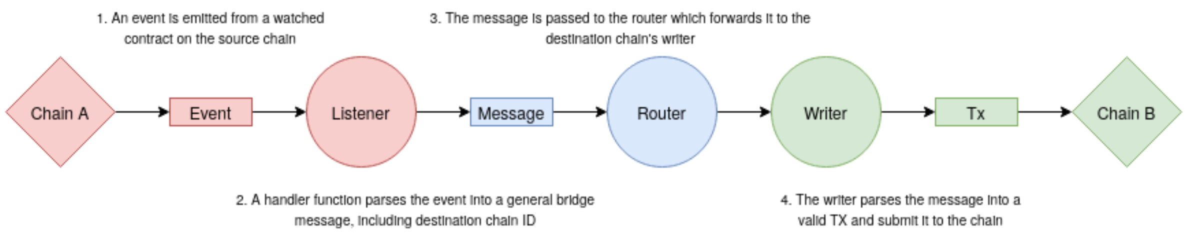

Fig. 3: Working of the Para and Central Routers

XCLP and its Working

Router Protocol is able to accomplish swapping of any asset through XCLP, which uses a stablecoin as a medium of value transfer between chains.

Let's say Alice wants to swap ETH that she holds on the Ethereum network (the source chain) to BNB on Binance Smart Chain (the destination chain). In order to execute this swap, Router Protocol will first accept Alice's ETH and exchange it for a stablecoin, such as USDC. The USDC is then locked in the Ethereum ParaRouter Reserve, which then emits a message that is picked up by the Central Router. The Central Router, with help of validators will validate the event and instructs the ParaRouter on BSC to unlock a proportionate number of BUSD (stablecoin on BSC) tokens that's locked in the BSC ParaRouter Reserve. The BUSD is then autonomously sent to one of the many AMM contracts available on BSC, such as PancakeSwap, BakerySwap and SushiSwap to name a few. An AMM is then chosen to execute the order based on a set of yardsticks such as price, slippage and fees. The swapped BNB will then be sent to Alice's BSC wallet address.

How do we ensure that the Destination Reserve has enough liquidity of stable coin?

In order to attract liquidity, Router Protocol encourages farmers to stablecoins in various ParaRouters. For example, every USDC that's locked in the ParaRouter, the user will given R.USDC, a representation or a proof, akin to LP Token, that can be used in other DeFi protocols, such as our companion project, Dfyn, where yield could be earned for providing liquidity on R.USDC/DFYN pool.

How do we ensure the security of our protocol?

When a user submits a request for transferring his/her tokens, a validator associated with the source chain posits a proposal that needs to be accepted by a certain number of other validators. This ensures that no single validator has the authority to void a valid transaction or carry out a malicious transaction. Furthermore, since no validator knows the identity of other validators, there is very little possibility of collusion. On the off chance that the validators find a way to collude with each other, the security of the network still won't be put at risk since at least one of Router's own validators needs to approve the proposal for the transaction to occur.

During this whole process, the custody of your assets is maintained with the smart contract. Therefore, if any suspicious activity is detected, your tokens will be returned to you.

Router and Dfyn

Dfyn.network is a functional AMM-based decentralized exchange (DEX) based on the advanced Layer 2 scaling solution built by the Polygon (formerly Matic) Network. Dfyn offers the ability to perform instant, gasless transactions. Dfyn utilizes Biconomy, a relayer infrastructure network and transaction platform that provides users with powerful APIs. These APIs essentially abstract away blockchain complexities by implementing gas-efficient meta-transactions.

Dfyn acts as Router's liquidity node and uses Router to ensure that the best price is available across chains to continuously arbitrage assets with other chains so that the asset prices are in sync.

How can one farm Dfyn tokens?

The users can farm Dfyn tokens by staking their R.USDC tokens, where R.USDC is the representation asset (akin to LP tokens) received in return for locking stablecoin in the ParaRouter's Reserve.

Router's Flow

There are, in total, six possible scenarios that can occur when a user's request for asset transfer is received. These include:
Scenario 1: When there is sufficient liquidity of the asset on both sides of the bridge
Scenario 2: When there is no reserve of the asset on the target chain
Scenario 3: When there is no reserve of the asset on the source chain
Scenario 4: When there is no reserve of the asset on the source and target chain
Scenario 5: When there is AMM (Dfyn) reserve of the asset on target chain
Scenario 6: When there is partial reserve of the asset on target chain

To demonstrate Router's flow in each of the aforementioned scenarios, let us consider an example wherein a user wants to transfer 100 USDC tokens from Ethereum chain to Binance Smart Chain (BSC).

Scenario 1: Sufficient liquidity of the asset on both sides of the bridge

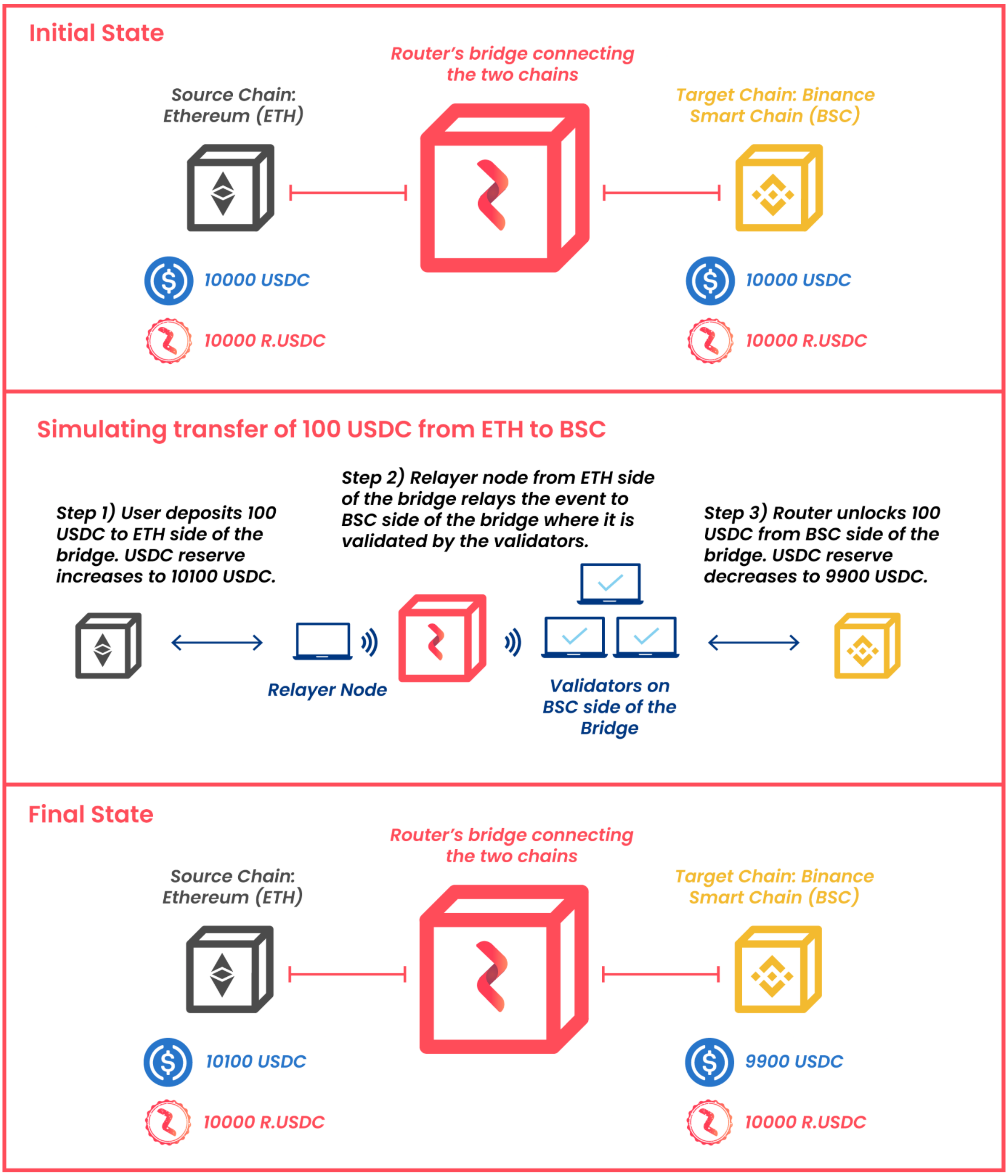

Fig. 4: Router's flow when there is sufficient liquidity of the asset on both sides of the bridge

Scenario 2: No reserve of the asset on the target chain

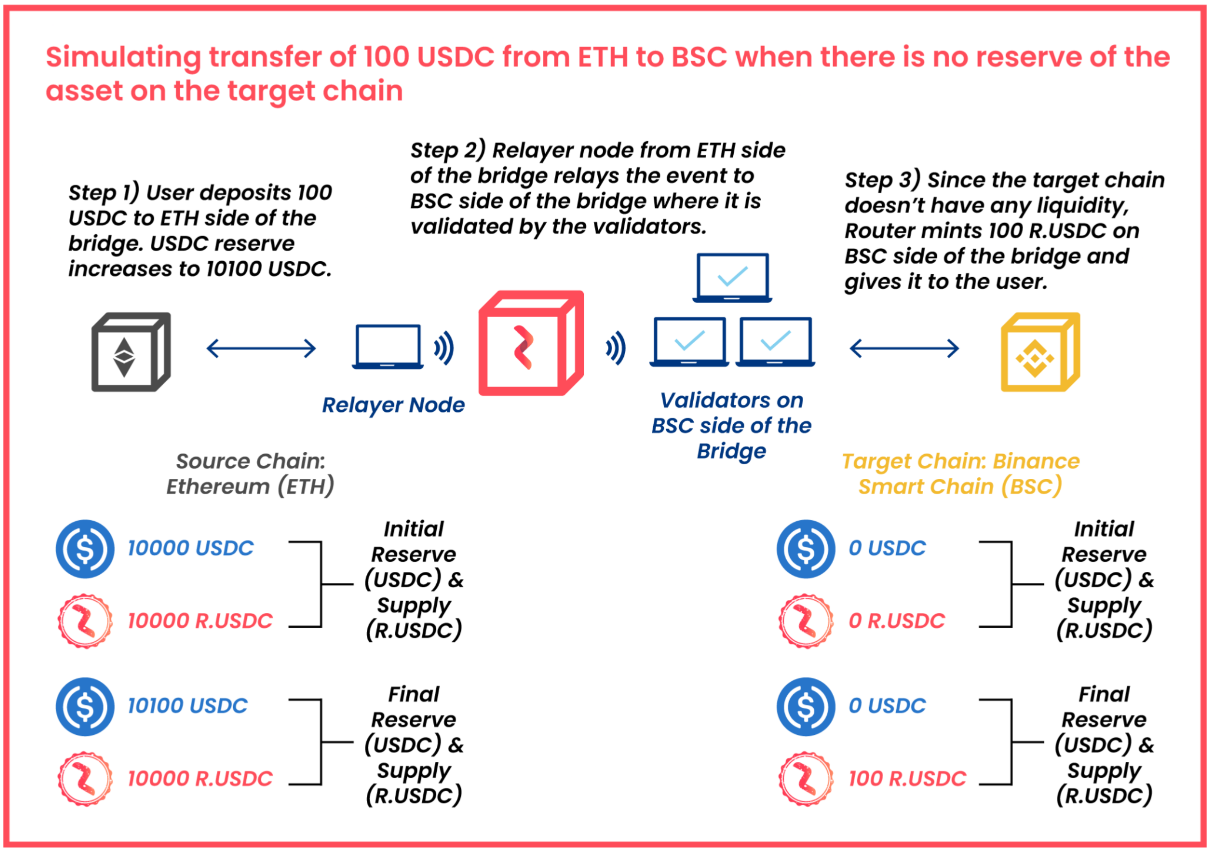

Fig. 5: Router's flow when there is no liquidity of the asset on the target chain

Scenario 3: No reserve of the asset on the source chain

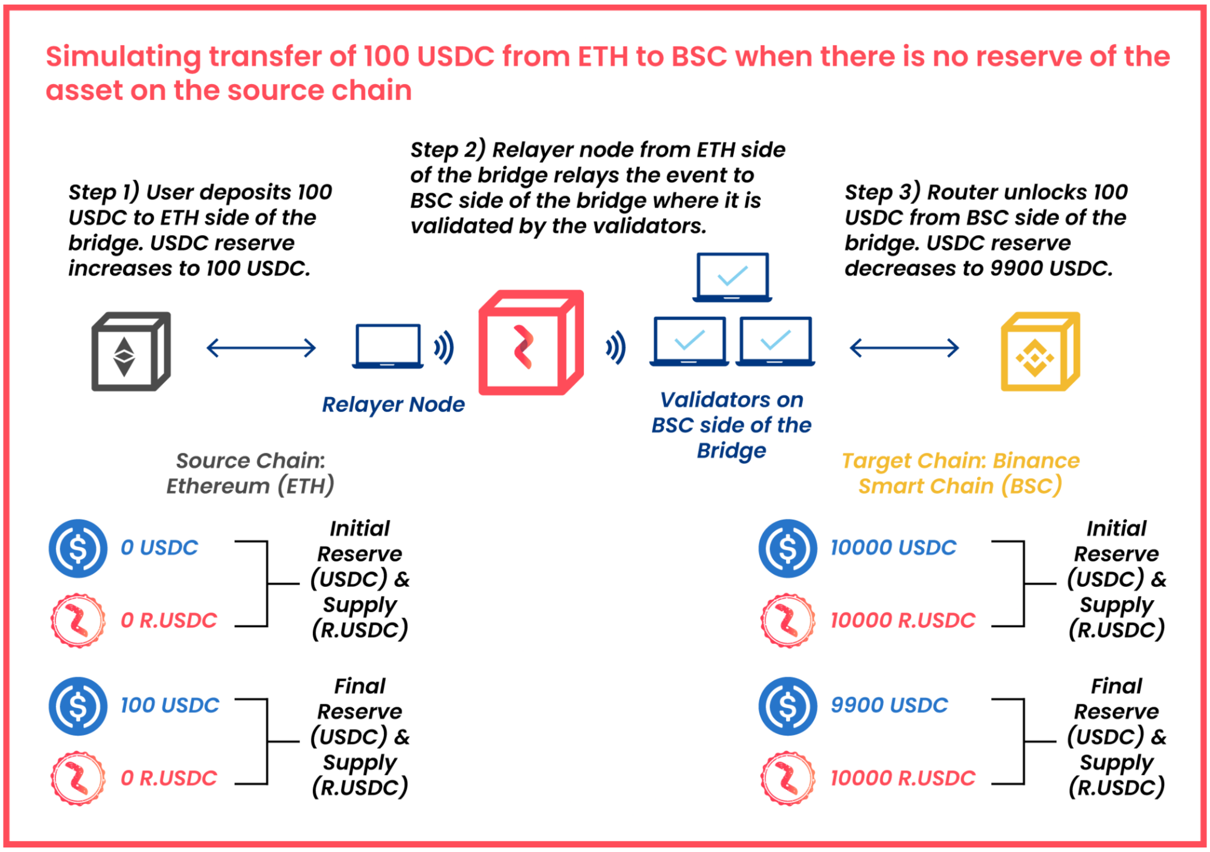

Fig. 6: Router's flow when there is no liquidity of the asset on the source chain

Scenario 4: No reserve of the asset on the source and target chain

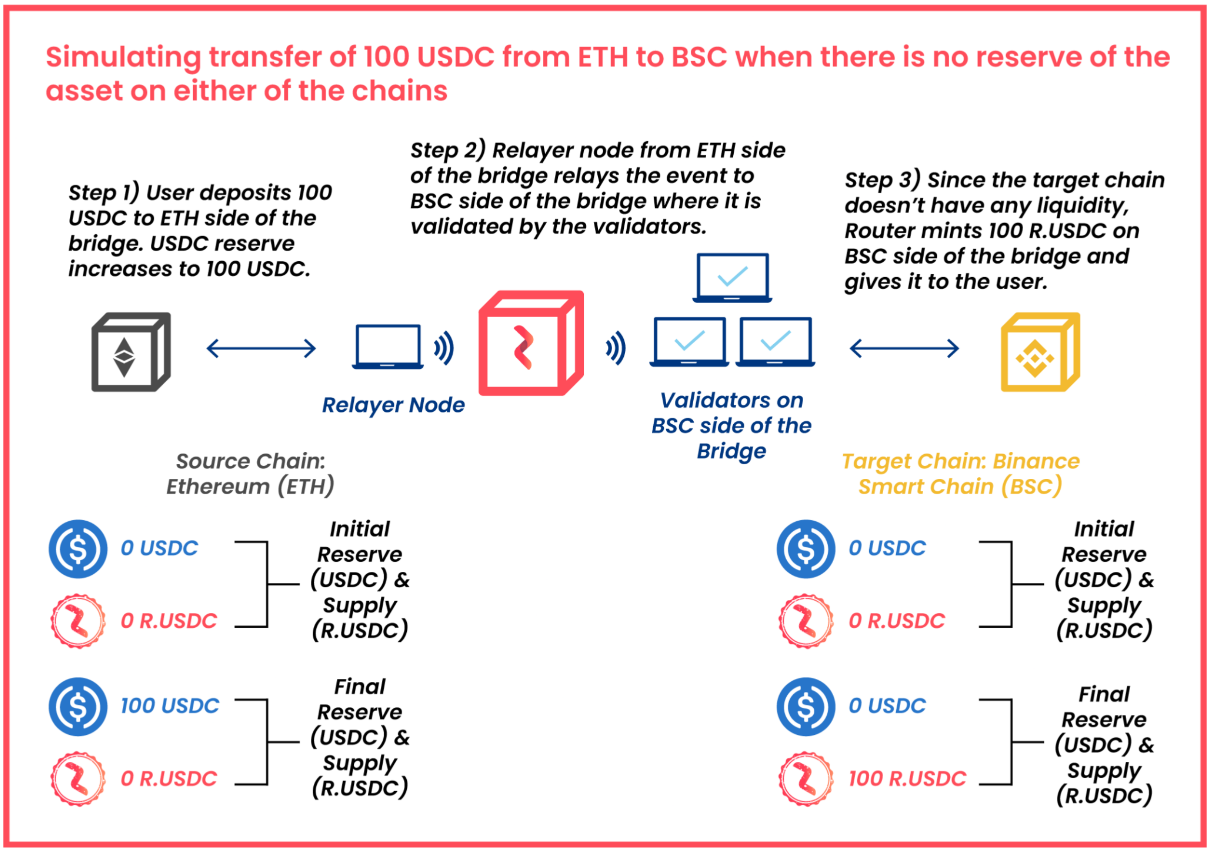

Fig. 7: Router's flow when there is no liquidity of the asset on either of the chains

Scenario 5: AMM (Dfyn) reserve of the asset is available on the target chain

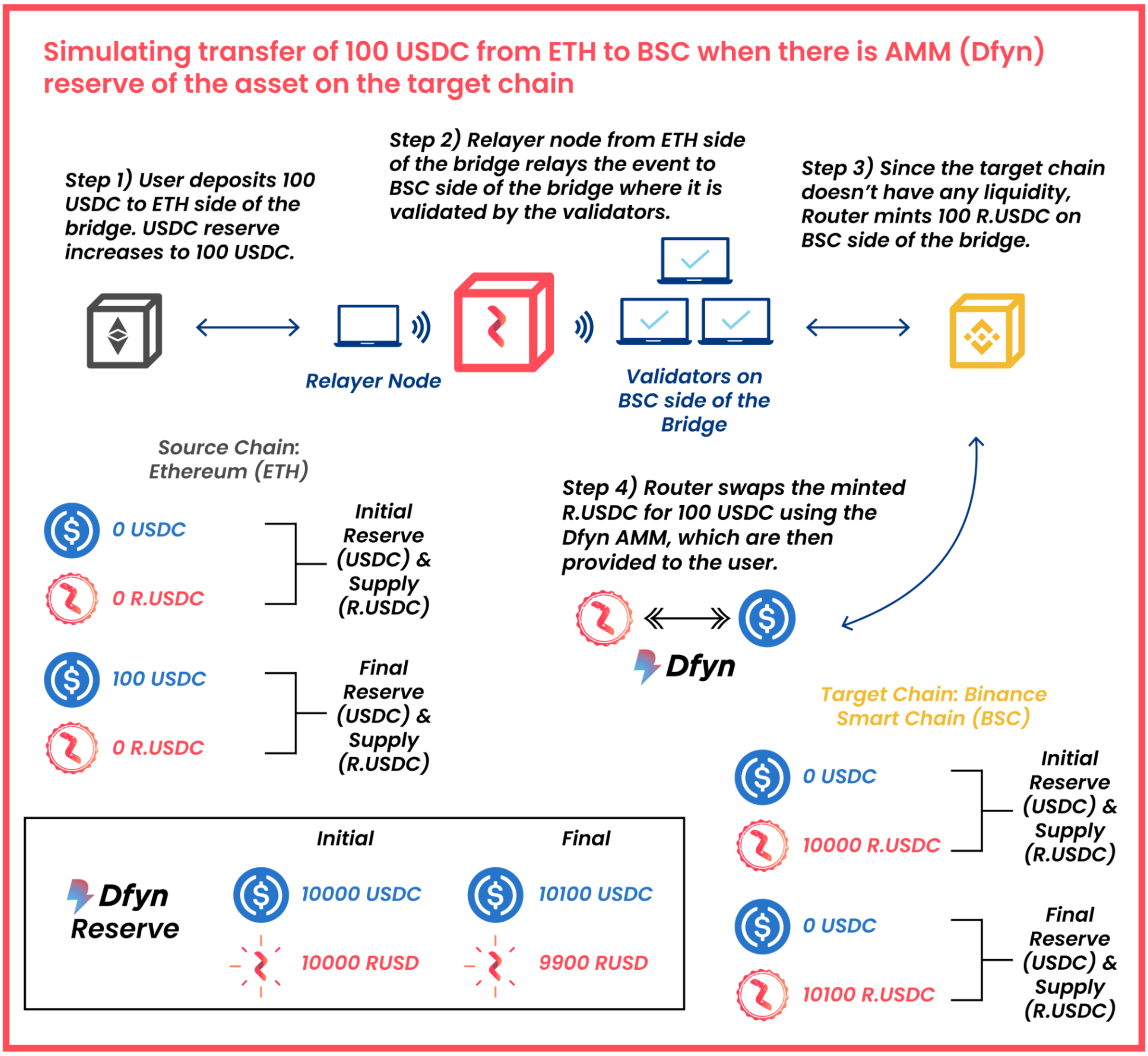

Fig. 8: Router's flow when AMM reserve of the asset is available on the target chain

Scenario 6: Partial reserve of the asset on target chain (with AMM Reserve)

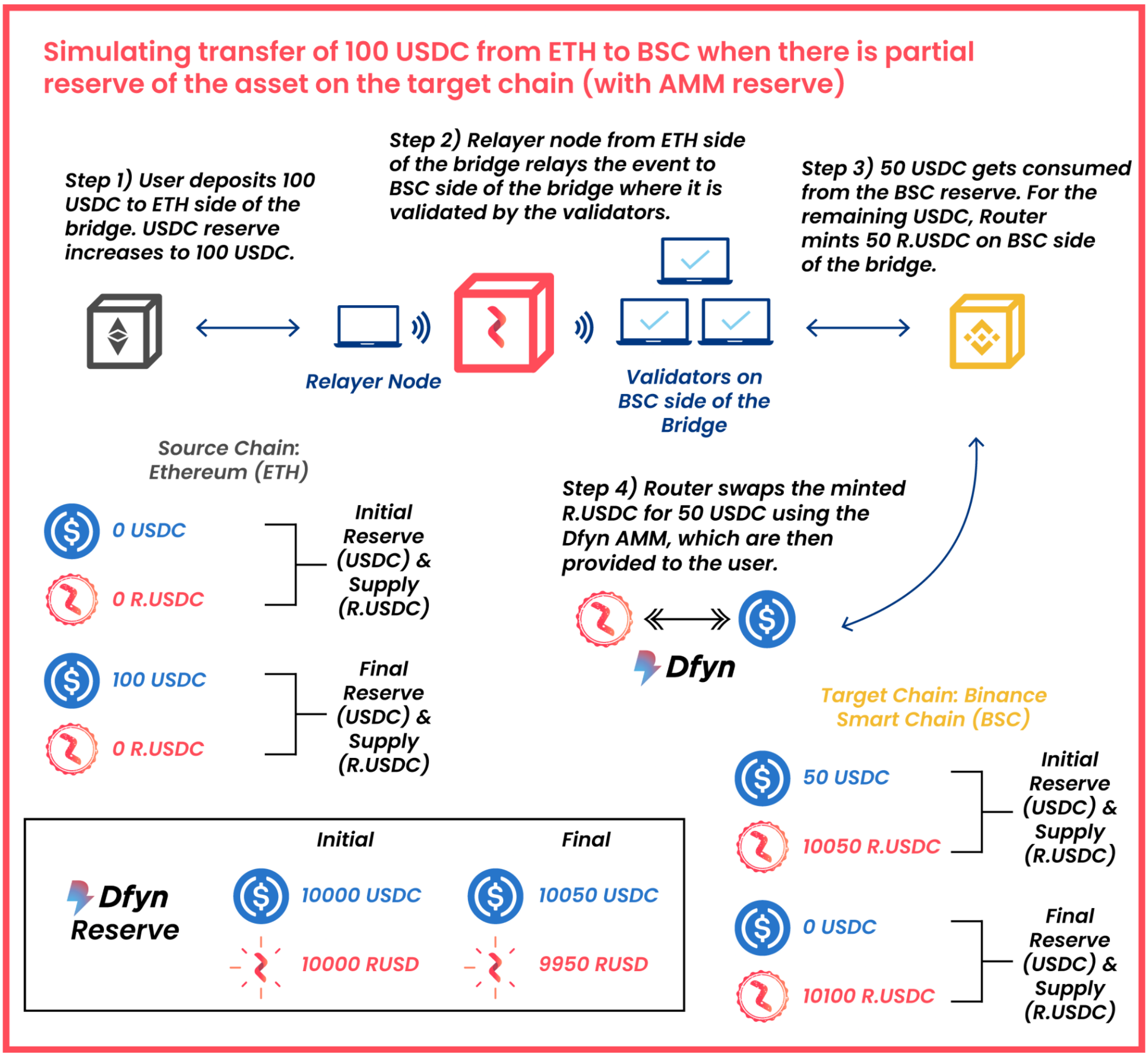

Fig. 9: Router's flow when partial reserve of the asset is available on the target chain

Features

1. Seamless

As a cross-chain liquidity infrastructure primitive, Router Protocol posits a seamless bridge between Layer 1 and Layer 2 protocol, allowing liquidity to flow with ease across isolated liquidity pools.

2. Safe

Router Protocol, powered by Cross Chain Liquidity Protocol (XCLP), is the first protocol that enables swapping of assets through multichain asset swap with stablecoin as the medium of value transfer. Since stablecoins in general have less volatility than most cryptocurrencies, their use as the medium for value transfer minimizes the safety risks associated with large-scale asset transfers.

3. Transparent

In the existing systems, when the need to transfer assets from one blockchain system to another occurs, users are kept in the dark on exactly what goes on under the hood, and are forced to pay high fees to facilitate technically simple transfers. Using Router will be completely transparent, and users will be able to see what goes on “under the hood” every time they interact with the protocol.

4. High QoE

Being transparent, however, doesn’t have to mean being complicated. With Router, swapping Asset A on one chain for Asset B on another chain will be as simple as booking a ticket online between two cities. You set the parameters of the trade, optimizing for price/execution certainty etc and the protocol abstracts out all the underlying complexity for you. This ensures that users have a high QoE when swapping assets.

5. Blockchain Agnostic

Router Protocol is a blockchain agnostic liquidity aggregation protocol that works perfectly well with all the underlying blockchain technologies. What this essentially means is that the users can use Router in coalition with any blockchain network of their choice.

6. Best Price Discovery & Least Slippage

With bridges to all major blockchains, Router will achieve smart order routing by not only traversing through the same blockchain for best prices but also go to different blockchains and their AMMs to fulfill the order at the right prices with least slippage.
For example, let us say, Router finds a better BTC/USD price on a venue on the Solana blockchain instead of UniSwap on Ethereum, so Router will try to fill that order from Solana.

7. Cross Chain Governance

Router provides native support for cross-chain DAO, thereby allowing users to participate in governance across multiple blockchains.

8. Unified Gas Fee

Cross-chain asset transfers require a transaction to be processed through various chains, with each chain requiring a gas fee to be paid in a token that’s native to that chain. Router simplifies this process by eliminating the need for paying nagging gas fees by allowing users to pay a single time fee for asset transfer.

Incentivization

Router Liquidity Mining Program:

Users will be rewarded in ROUTE tokens for providing liquidity on Uniswap for ROUTE-ETH and ROUTE-USDC pairs.
The steps to provide liquidity and earn rewards are:-
1. Provide liquidity for either of the ROUTE pairs on Uniswap by adding liquidity - ROUTE/ETH Pair or ROUTE/USDC Pair.
2. Stake those LP tokens on Space Farm.

Alternatively, you can use Dfyn.network (built on top of Matic) to add liquidity for any pair whose pool is listed on GalaxyFarm. Next, stake the LP tokens on GalaxyFarm to earn $ROUTE tokens. Advantages of mining liquidity in GalaxyFarm:

- No lock-in of any pooled capital, withdraw anytime.
- Because Dfyn enables gasless transactions thanks to its integration with Biconomy, users can easily switch between pools.This makes it easier for the liquidity miners to take advantage of arbitrage opportunities across various pairs on Dfyn as well as those opportunities that exist between DFYN and other Layer-2 AMMs.

Delegation:

Router holders will be able to provide liquidity to the platform through validator nodes and earn a share of the gas fees that is charged by the platform for enabling cross-chain transactions.

Router's XCLP Testnet

Router's XCLP testnet is live at testnet.routerprotocol.com. The testnet currently allows users to swap stablecoin assets between the testnets of Ethereum (Kovan), Matic/Polygon, BSC, and Huobi chains.

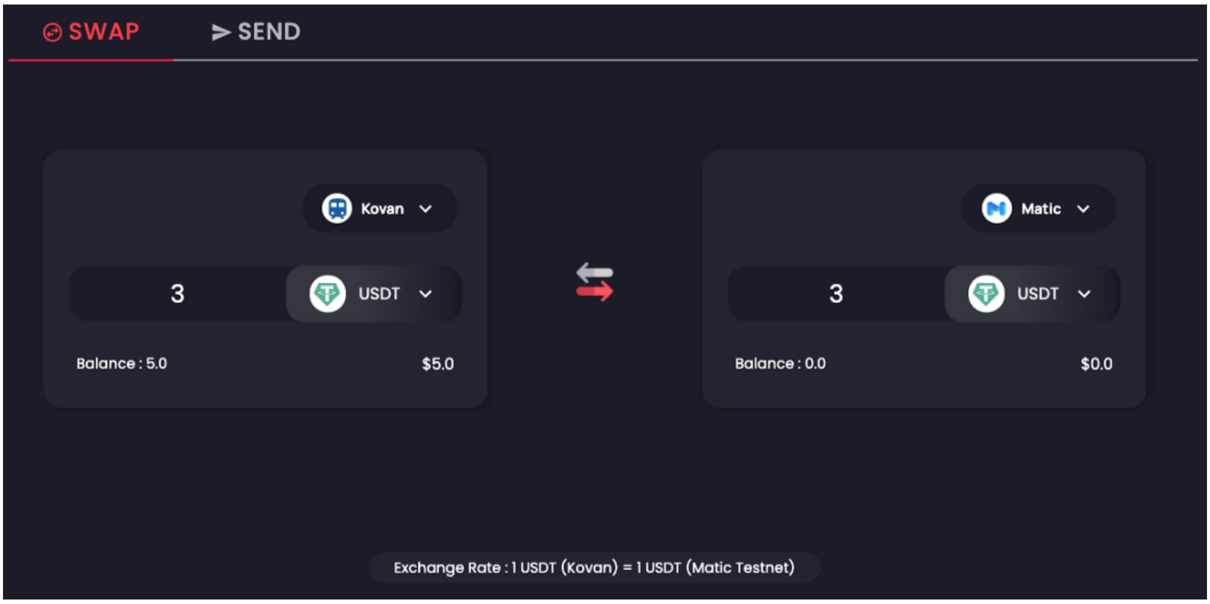

Fig. 10: Router Protocol's XCLP based XSWAP

We also have a [faucet]() where you can get all the testnet coins you need. You will need stablecoin assets on the testnet to play around with the demo. For example in the figure given above, we need Kovan-ETH to provide gas for the transaction as well as test USDT on Kovan to perform the swap.

Fig. 11: Router Protocol's testnet faucet

For the swap, you will need a web3 wallet, and we recommend MetaMask. MetaMask will throw up a notification for approving the network change request when you select different networks on the left side of the screen, which shows the source chain and assets. This has been done so to ensure that users are not burdened with the task of manually adding parameters on MetaMask for various networks they are interacting with.

The swaps take less than 1 minute on the testnet to complete. You might have to wait for up to a minute to see the swapped assets back in your wallet on the destination chain. Router Protocol's XCLP drastically reduces cross-chain wallet transfer times. For example, currently it can take up to 4 hours for transferring inter-chain assets. Router's XCLP will reduce those transfer times to less than 1 minute.

Important Note

Router Protocol will be launching its protocol in phases. The first phase is focused on stablecoins, where we demonstrate the ability of the protocol to communicate across blockchains and swap stablecoin assets with a 1:1 ratio. The next version of the protocol will allow for the transfer of various token assets in addition to stablecoins. A subsequent version will allow users to swap different assets between two different chains; for example, swapping USDT on Matic for ETH on BNB chain. For achieving this, we will be ramping up significantly on our affiliate AMM aggregator, Dfyn, as well as other AMMs on various chains.

Our Collaborations

Router and Matic

Matic is a Layer 2 blockchain with a huge and vibrant ecosystem with hundreds of DApps and a supportive community of users. Some of the popular Dapps on the Matic network are Oropocket, Polymarket, and EasyFi. The Router team is a big fan of Matic because of a variety of reasons — first and foremost the product technology is advanced, open-source, and the developer support is amazing. Deployment is straightforward, code is well documented, the transaction throughput is high while the network is scalable.

Matic's system works by using PoS "public" Plasma checkpoint nodes which are pushed to the Ethereum mainchain. These nodes are connected to Ethereum via a "deposit bridge" and can theoretically achieve 216 transactions per block. In theory, the network could handle millions of transactions per second on multiple chains in the future.

A liquidity bridge between Matic and Ethereum will provide a scaling solution to Ethereum that is near-instant, low-cost, and incredibly flexible. Not only that, such a liquidity bridge will also allow the Matic community to reap the benefits of Ethereum's huge liquidity.

Router and Glitch

Built from scratch, GLITCH is a blockchain-agnostic super protocol designed specifically for trustless money markets. The GLITCH protocol aims to take some of the load off Ethereum by offering high transaction throughput, near-zero transaction fees, and a revenue-sharing model that rewards network supporters, dApp developers, and end-users. It's a new breed of DeFi "Operating Software" that improves upon the best of existing chains in an effort to unite the entire ecosystem of dApps.

Together, Glitch Finance and the Router Protocol are facilitating a bridge between GLITCH, Ethereum, and other blockchain protocols that allow dApp infrastructure. This will bring to life the dream of interoperability between major blockchains and enable users to interact with all the DeFi projects common to the two platforms.

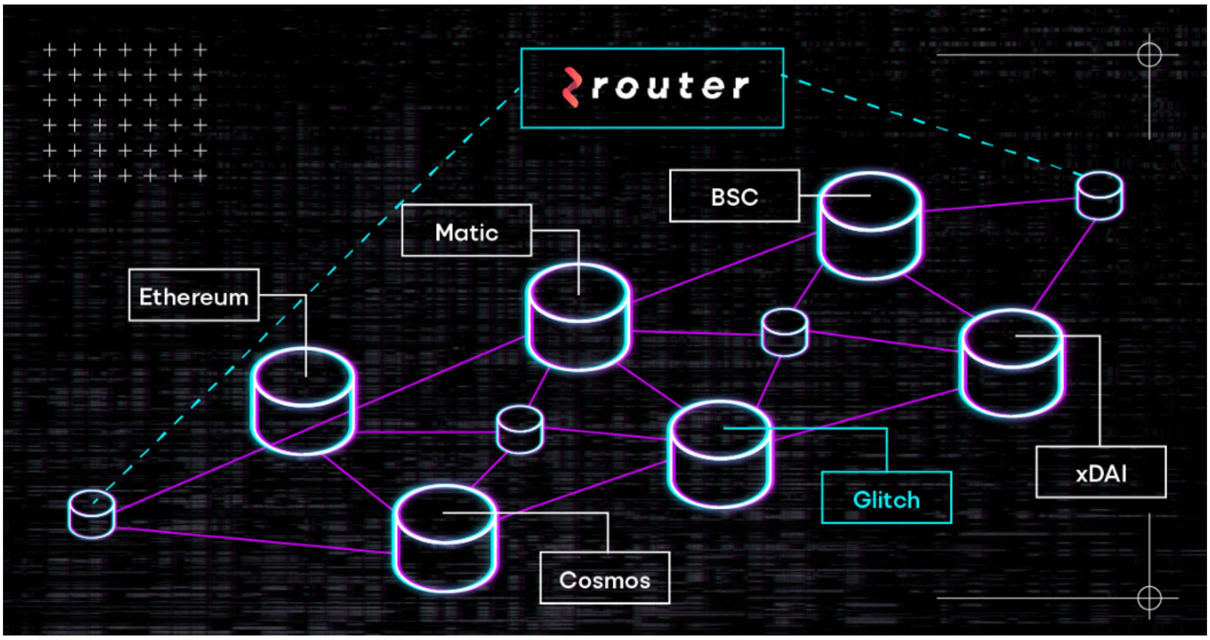

Fig. 12: How Glitch will fit into the Router Ecosystem (Source: [Glitch Finance's Medium Post]())

Router and Bonded Finance

The Bonded platform was created to incubate and deploy experimental, high-yield, smart-contract driven, financial instruments that push the bounds of open finance. Bonding is an algorithmic model that aims to unlock, aggregate, and de-risk ~50 billion in dormant value distributed amongst untapped digital assets by allowing supporters of qualifying altcoin projects the opportunity to borrow against these assets or pool them and start earning.

Devoted to providing nascent altcoins the opportunity to grow past the chain they were launched on, Bonded Finance will utilize Router's cross-chain bridges to promote liquidity migration. Router’s mission to connect what would have otherwise been isolated networks pairs perfectly with Bonded’s goal to utilize the potential of the liquidity locked in those networks.

Together, Router Protocol and Bonded Finance will bridge the gap between isolated and underused pools of liquidity, unlocking the potential of the DeFi industry.

Router and Avalanche

Avalanche is an interoperable, highly scalable, open-source ecosystem for launching decentralized applications and enterprise blockchain deployments. The collaborative efforts between Router and Avalanche will allow Router users to seamlessly deploy liquidity to any automated market makers (AMMs) on Avalanche. At the same time, this collaboration gives Avalanche users access to the huge amount of liquidity provided on Ethereum and other similar blockchains that Router supports.

Router and UNION

UNION is a technology platform that combines bundled protection and a liquid secondary market with a multi-token model. UNION addresses the problem of over-collateralization by introducing Collateral Optimization (C-OP), a collateral protection product that embeds directly within its own lending protocol and creates a composable “lego block” for other blockchain protocols. In addition to smart contract protection that has become a must-have for DeFi, the protocol addresses the problem of over-collateralization.

By employing Union’s smart contract and over-collateralization protection, Router Protocol can benefit from safer and more efficient liquidity provision across blockchain networks. Furthermore, adding Union’s C-OP to Router will enable the protocol to improve the capital efficiency of its pools, a move that will ultimately expand the liquidity on the platform. Individual users and protocols utilizing Router’s bridges can rest assured that they will be protected against downside price volatility.

Router and Dafi

Created in the wake of the catastrophic 2018 crypto market crash, DAFI set out to fix the broken incentive model that plagued most of the industry. DAFI protocol creates a relationship between network rewards and network adoption by releasing dTokens that are tied to network consumption. Dafi’s mission is to introduce a completely new inflation model, so every decentralized economy can incentivize in proportion to their own adoption metrics.

By distributing synthetics tied to network-adoption, users are rewarded when the network consumption rises. The protocol firmly believes that this has the potential to spur long-term adoption and create better inflation models.

Collaborating with DAFI will allow us to explore the possibility of using synthetics to incentivize and distribute the rewards. We believe this has the potential to ensure that the price and token metrics of the underlying ROUTE token remain unaffected by any current or future incentives.

As of now, around 17.2% of ROUTE tokens are given to users that aggregate liquidity on decentralized pools in the form of incentive reward pools. While we believe rewarding those that utilize the network is the right way to go, we are aware that this could potentially devalue ROUTE and reduce the overall security of the network.

DAFI will provide Router with a synthetic dROUTE token that will be pegged to the demand of the network. The supply of the token will expand and reduce according to network adoption. What this essentially means is that in a low-demand market, the scarcity of synthetic tokens increases to protect the network. When the demand is high the synthetics will expand in quantity and provide users with more rewards.

Router and Cellframe

Cellframe is a platform that enables users to create various blockchain services that don't suffer from scalability issues. The protocol provides high scalability by implementing original 2-level sharding. The platform is also quantum-resistant and allows for multiple key and signing algorithms, providing developers with flexibility and a new level of security. However, one of the most important innovations Cellframe brings is enabling distributed services to interact directly with the resources of an operating system.

Given its advanced functionalities and a dedication to providing secure and scalable cross-chain transfers, Cellframe has positioned itself as a perfect partner to Router Protocol. We believe that Router will be able to leverage Cellframe's smart contract functionality to provide our users with a better way to interact with the liquidity locked on other DeFi protocols.

$ROUTE Tokenomics

At Router, we have always envisaged transparency as the forerunner in the world of DeFi. Everything from the way we set up the tokenomics behind the protocol to our quiet and unassuming seed raise was done in the spirit of open-source building.

We have devised our token distribution to be as fair as possible for all of the system's stakeholders without having to sacrifice resources needed to further develop the Router ecosystem. Here's a detailed breakdown of the $ROUTE token allocation and the vesting process for each of the system's major stakeholders.

The entirety of $ROUTE's total supply has been allocated to various groups and entities in the ecosystem. To give everyone skin in the game, most of the tokens will remain locked for at least 3 months, with a significant part of the holdings released through small monthly unlocking. Out of the 20,000,000 tokens, only 1,022,865 were unlocked on day 0, leaving 94.34% of the supply locked for between 3 and 21 months.

Table 1: Summary of $ROUTE Tokenomics

Allocations	**Token %**	**Vesting**
Seed Round	3.00%	20% unlocked after 6 months, then daily unlocking of tokens for 9 months
Private Round 1	2.50%	20% unlocked on day 0,, then daily unlocking of tokens for 9 months
Private Round 2	5.11%	20% unlocked on day 0,, then daily unlocking of tokens for 9 months
Reward Pool	17.22%	Locked in SC for daily distribution over a year based on Router's reward program
Team	15.00%	10% unlocked after 9 months, then monthly unlocking of tokens for 12 months
Ecosystem Fund	25.42%	8% unlocked on day 0, 7% unlocked after 3 months, then 5% monthly unlocking of tokens for 17 months
Liquidity Provision Fund	1.75%	22.86% unlocked on day 0, then remaining distributed quarterly for 12 months
Foundation	20.00%	10% unlocked after 9 months, then monthly unlocking of tokens for 12 months
Partners and Advisors	10.00%	10% unlocked on day 0, 10% unlocked after 3 months, then daily unlocking of tokens for 9 months
Total	**100%**	

Seed Round

The latest seed round saw 3% of the total 20 million $ROUTE coins allocated to a consortium of crypto investors from the US and Asia with a lock-in period of 6 months. After the initial 6 months, 20% of their tokens will be unlocked, followed by a linear unlock for spanning over a period of 9 months.

- Price of $ROUTE tokens during the seed round: $0.175

Private Round 1

During our first private funding round, a total of 2.5% of $ROUTE tokens were allocated to investors. To encourage participation in the Router ecosystem, these investors were able to unlock 20% of their tokens on day 0. The rest of their tokens will be unlocked over the next 9 months, locking them into the ecosystem.

- Price of $ROUTE tokens during the first private round: $0.200

Private Round 2

The second private funding round saw 5.11% of $ROUTE's total token supply allocated to a select group of investors. Specifics regarding the locking and unlocking of tokens remained constant over the two private rounds.

- Price of $ROUTE tokens during this round: $0.275

Reward Pool

Ensuring a fair and stable reward distribution for those staking in the Router ecosystem was a top priority and required allocating a significant portion of our supply to it. The reward pool will hold 17.22% of the total supply and have only 0.92% of the tokens unlocked on day 0. The rest of the tokens will be locked in Router's smart contract to be distributed daily in the next 12 months.

Team

Learning from the mistakes of countless DeFi protocols and blockchain companies, we gave ourselves only a 15% stake in the total circulating supply of $ROUTE tokens. It was of the utmost importance for us to establish a level of trust with the community, which is why all of the tokens allocated to the development team will remain locked for 9 months. After 9 months, 10% of our allocation will be unlocked, while the test will be unlocked, again in small increments, every month for 12 months.

Ecosystem Fund

While it was never our goal to create a speculative asset out of $ROUTE, we understand the value of monetary incentives, especially in a community as decentralized as Router's. Therefore, we have allocated the largest portion of our total supply to the ecosystem fund, which will see the funds distributed to projects and developers looking to build on Router.

A total of 5,084,000 $ROUTE tokens, or 25.42% of the circulating supply, have been allocated to the ecosystem fund. Only 8%, or 406,720 tokens, will be unlocked on day 0. Following the initial distribution, 7% of the tokens will be unlocked after 3 months, following which they will see 5% unlocked every month until the fund is depleted.

Liquidity Provision Fund

A great protocol is worth nothing without liquidity. Our goal with the liquidity fund was to create a system that facilitates movement and action. The fund received 1.75% of $ROUTE's total supply, with 22.86% of the 80,000 tokens unlocked on day 0. The remaining 270,000 tokens will be unlocked quarterly for the next 12 months

Foundation

To incentivize good behavior on the platform should start, we allocated 20% or 4,000,000 $ROUTE tokens to the foundation. The entirety of their tokens will be locked for 9 months, after which only 10% of their holdings will be released. This will be followed by a monthly unlocking process which will last for 12 months.

Partners and Advisors

Router's partners and advisors, while very important to the ecosystem, have a relatively small stake in the system. We allocated 10% of $ROUTE's total supply or 2,000,000 tokens, to a number of companies and experts that support our network. Only 10% of the allocation has been unlocked on day 0 — the rest of the funds will remain locked for another 3 months. After the initial 3 months are over, another 10% of their tokens will be unlocked, with small increments continuing to unlock daily for 9 more months.

Roadmap for Future Development

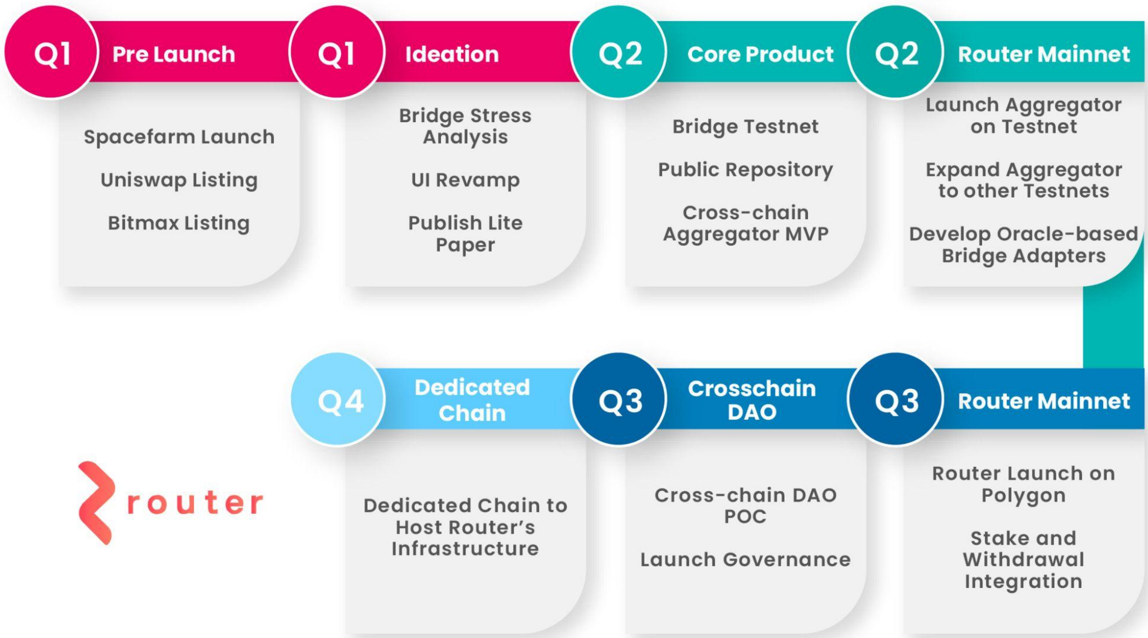

Fig. 13: Router's Roadmap for 2021

Frequently Asked Questions (FAQ)

1. How is Router different from other cross chain DApps?

Existing cross-chain liquidity protocols give the user an asset that is native to their blockchain in exchange for an asset user provides, where this native asset might not have some real liquidity and exposure. Router being blockchain agnostic solves this by abstracting the native asset and giving the user the actual asset requested in the swap.

Additionally, unlike most of the existing cross chain protocols which are focused on L1 blockchains, Router can be implemented on top of both L1 and L2 blockchains. We are working with multiple L2 chains such as Matic, on which we have already built a super-fast, gas-less AMM called Dfyn.

2. Who keeps the custody of assets while trading?

Our completely audited smart contracts and your cryptocurrency wallet will maintain the custody of crypto assets. The chain of custody is always transparent and traceable.

3. How are asset prices determined?

The Router protocol traverses various liquidity sources like PancakeSwap, BakerySwap and SushiSwap, to name a few, to find the source with the best price to complete the order.

4. Does liquidity migration across the Router bridge change the circulating supply of a token?

Crossing the bridge doesn't change the circulating supply of a token issued on the source chain or the target chain — tokens that leave the source chain are locked and the same number of tokens are minted on the new chain as a 1:1 pegged token.

5. Why is the $ROUTE token required?

$ROUTE has a limited supply of 20 million tokens and has multiple utilities, including:

- **Governance -** Selection of Central Router validator via Proof-Of-Stake.
- **Unified gas fee -** when a transaction is being processed through multiple chains, every step requires a gas fee to be paid in a token that's native to the particular chain. The fee is simplified for the user and the user will only have to pay the gas fee only once in $ROUTE tokens.
- **Swap fee -** A competitive 0.05% fee will be charged over the swap, payable in ROUTE tokens. This fee is distributed to the Central Router validators.

6. Will I be forced to pay the gas fees in $ROUTE tokens whenever I want to perform an asset transfer/swap?

No. Although the users will be incentivized to pay their fees in $ROUTE tokens, the users can also choose to pay the fees in the token that they want to transfer/swap.

7. Why to use Router instead of just using a DEX?

The reason for this is threefold:

1. We provide a faster asset transfer mechanism than most DEXs.
2. We ensure better QoE for our users by enabling smart order-routing in our XCLP protocol.
3. We do not forego security and transparency that form the backbone of DEXs.

8. When can I expect Router to go live?

Our XCLP testnet is already live at https://testnet.routerprotocol.com/. The users can expect our full fledged mainnet to be deployed in Q2/Q3 of 2021.

9. Which networks does Router's testnet support?

The testnet currently allows users to swap stablecoin assets between the testnets of Ethereum (Kovan), Matic/Polygon, BSC, and Huobi chains.

10. What is the difference between R.USDC and RUSD?

R.USDC is a representation token or a proof, akin to LP Token, that can be used in various DeFi protocols, such as our companion project, Dfyn, where yield could be earned for providing liquidity on R.USDC/DFYN pool. On the other hand, RUSD can basically be thought of as Router's version of USDC. It is pegged in the ratio of 1:1 against USDC.

11. What is SpaceFarm?

SpaceFarm is a yield farming ecosystem that integrates multiple blockchains together to allow users to stake their LP tokens to earn $ROUTE tokens irrespective of which blockchains they use. For more information, you can refer to our medium article here.

12. How to use Dfyn.network to earn $ROUTE tokens on SpaceFarm?

To farm $ROUTE on Dfyn AMM, one needs to first load their assets on the Matic Network since the Dfyn is a Matic network based Uniswap styled AMM. Next, you need to configure your web3 wallet to work with Matic Mainnet. Following this, you need to add liquidity for your desired token pair on the Dfyn platform. Now, you can stake your LP tokens on SpaceFarm to earn $ROUTE tokens. A step by step guide for the entire process is provided here.

13. What is GalaxyFarm?

GalaxyFarm is an instant, gasless, staking, and farming ecosystem developed by Router Protocol and hosted on Polygon based DEX - Dfyn.Network. For more details, kindly refer to our medium article here.

14. How can I reach the Router team?

You can contact us via email at: contact@routerprotocol.com. You can also join our telegram channel or follow us on twitter here.