

路印协议简介

About Loopring Protocol

路印协议简介

About Loopring Protocol

解决的问题

Problems Solved



不安全

Lack of Security



不透明

Lack of Transparency



流动性分散

Partition of Liquidity

路印协议简介 | 特点

About Loopring Protocol | Features

100% 安全

100% Secure



100% 透明

100% Transparency



流动性共享

Shared Liquidity



更加高效

Higher Efficiency



流量变现

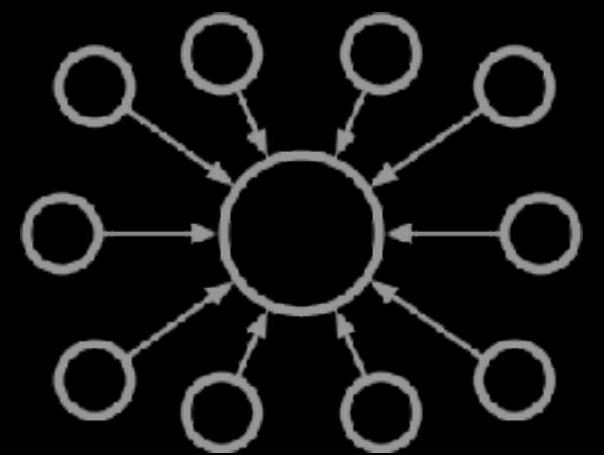
Traffic Monetization



路印协议简介 | 比较

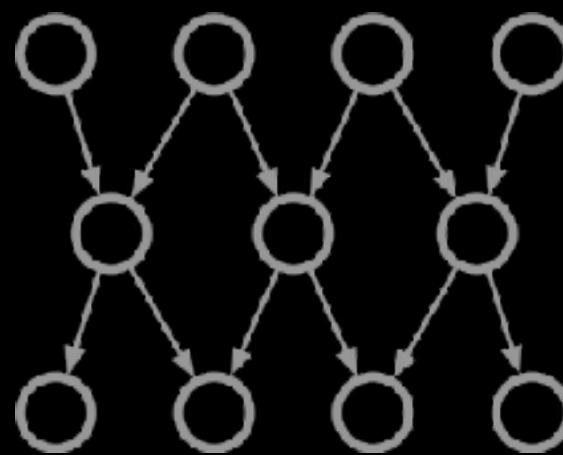
About Loopring Protocol

Compare to Centralized Exchanges



平台/吸引用户/盈利性

Platform/User Aquisition/For-Profit



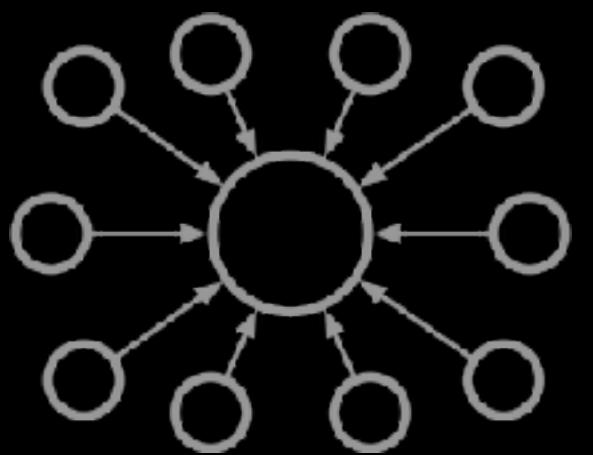
协议/吸引开发者/非盈利

Protocol/Developer Aquisition/Non-Profit

路印协议简介 | 比较

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Compare to Centralized Exchanges

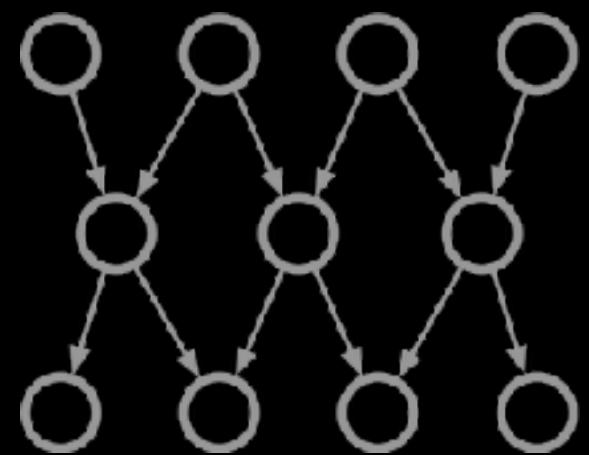


平台/吸引用户/盈利性

Platform/User Aquisition/For-Profit

闭源

Close Source



协议/吸引开发者/非盈利

Protocol/Developer Aquisition/Non-Profit

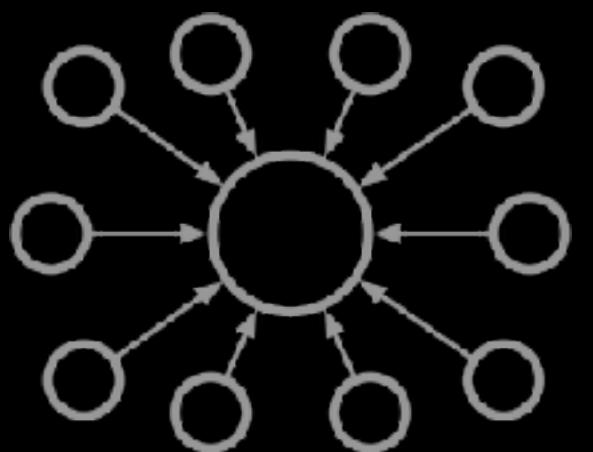
开源

Open Source

路印协议简介 | 比较

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平台/吸引用户/盈利性

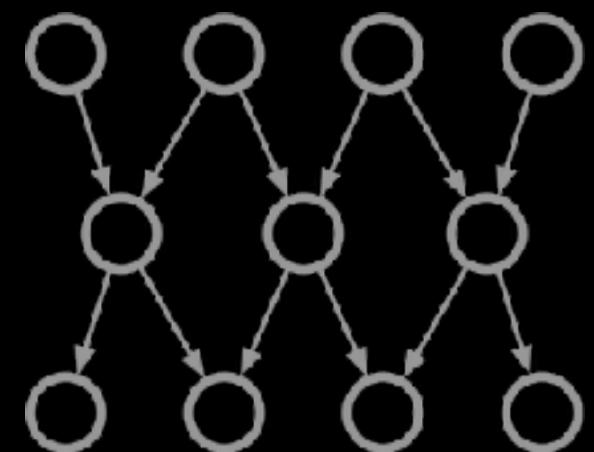
Platform/User Aquisition/For-Profit

闭源

Close Source

托管用户资产/高风险

Custodial Service with High Risks



协议/吸引开发者/非盈利

Protocol/Developer Aquisition/Non-Profit

开源

Open Source

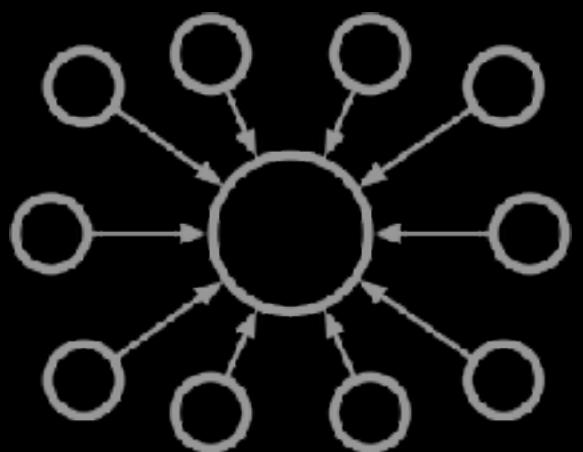
不托管用户资产/零风险

Non-custodial Service with No Risk

路印协议简介 | 比较

About Loopring Protocol

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平台/吸引用户/盈利性

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闭源

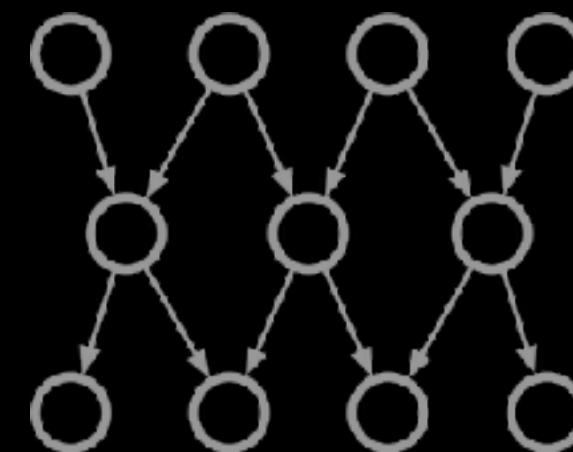
Close Source

托管用户资产/高风险

Custodial Service with High Risks

流动性中心化控制

Liquidity Controlled by One Central Party



协议/吸引开发者/非盈利

Protocol/Developer Aquisition/Non-Profit

开源

Open Source

不托管用户资产/零风险

Non-custodial Service with No Risk

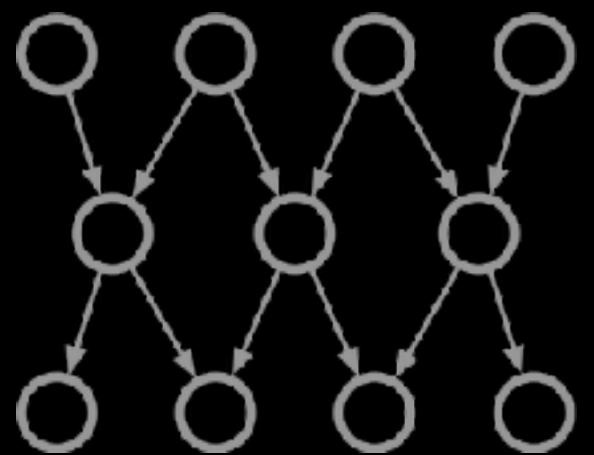
流动性分散式共享

Liquidity Managed and Shared by Multiple Parties

路印协议简介 | 比较

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协议/吸引开发者/非盈利

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Non-custodial Service with No Risk

流动性分散式共享

Liquidity Managed and Shared by Multiple Parties

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A brief history of Loopring

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A brief history of Loopring

白皮书发表

Whitepaper

06/15/2017



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A brief history of Loopring



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白皮书发表

Whitepaper

06/15/2017

TokenSale开始

TokenSale Started

08/01/2017

TokenSale成功

TokenSale Concluded

08/16/2017

1.0部署以太坊

1.0 Deployed on Ethereum

12/09/2017



路印协议简史

A brief history of Loopring



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路印协议简史

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DEX解决方案

DEX Solutions

DEX解决方案

DEX Solutions

前端方案

Frontend Solutions

前端方案

Frontend Solutions



侯宗保/前台工程师
Zongbao HOU, Frontend Developer

前端方案

Frontend Solutions

网页 DEX

网页 Wallex
Wallet + DEX

移动端钱包
Wallet App

开发工具包
SDK

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网页 DEX

Circulr

LRC-WETH

最新成交价 0.10000 WETH 24H 涨跌 0.00% 24H 最高价 0.10000 WETH 24H 最低价 0.10000 WETH 24H 交易量 0.00 WETH

0xeba7136a36da0f5e16c6b
dbc739c716bb5b65a00

最新挂单	价格 WETH	数量 LRC	LRC 撮合费
1.01000000	20.0000	47.91000000	
1.01000000	58.0000	0.00000000	
0.20000000	29.0000	0.00000000	
0.20000000	116.0852	0.00000000	
0.20000000	3.0000	0.00000000	
0.20000000	3.0000	1.61000000	
0.14142135	13.0000	4.87000000	
0.10000000	17.4503	5.61000000	
0.10000000	1.3391	3.21000000	
0.10000000	21.0000	0.00000000	
0.10000000	21.0000	0.00000000	
0.10000000	12.0000	3.19000000	
0.10000000	12.0000	3.20000000	
0.10000000	5.0000	0.01000000	

K线图

最新成交

价格 WETH	数量 LRC	LRC 撮合费
0.10000000	0.01200000	0.0032
0.10000000	3.54962162	0.9482
0.10000000	3.54962162	0.9503
0.10000000	3.54962162	0.9495
0.10000000	3.54962162	0.9503
0.10000000	3.54962162	0.9495
0.10000000	3.54962162	0.9503
0.10000000	3.54962162	0.9495
0.09486833	0.01863390	0.0044
0.00018708	53.54160000	0.9286
0.00068151	2.40000000	0.0000
0.00068100	347.00000000	0.6700
0.00067474	620.24208040	1.2000
0.00068100	31.75162014	0.8400
0.00136000	4.41176571	0.2854
0.00136000	4.59365284	0.2972
0.00068700	1869.00000000	3.7014
0.00068744	523.00000000	1.0357
0.00068744	325.00000000	0.6436
0.00068744	350.00000000	0.6931
0.00068744	488.00000000	0.9664
0.00068744	408.00000000	0.8080
0.00068744	637.00000000	1.2615
0.00068200	253.00000000	0.4961
0.00068200	505.00000000	0.9902
0.00068200	529.00000000	1.0373
0.00068200	543.00000000	1.0648
0.00068200	543.00000000	1.0648
0.00068200	558.00000000	1.0942
0.00068200	579.00000000	1.1354
0.00068200	590.00000000	1.1569
0.00072250	52.00000000	0.1148

网页 DEX

定制化

LRC-WETH

最新成交价 0.10000 WETH 24H 涨跌 0.00% 24H 最高价 0.10000 WETH 24H 最低价 0.10000 WETH 24H 交易量 0.00 WETH

0xeba7136a36da0f5e16c6b
dbc739c716bb5b65a00

最新挂单		
价格 WETH	数量 LRC	LRC 撮合费
0.10000000	78.0000	78.78000000
0.20000000	151.0853	30.21705731
0.14142135	13.0000	1.83847755
0.10000000	115.7895	11.57895135
0.09000000	999.9814	89.99832295
0.04000000	1000.0000	40.00000000
0.01047000	60.0000	0.62820000
0.00900000	2284.0000	20.55600000
0.00300000	17668.0000	53.00400000
0.00250000	13510.0000	33.77500000
0.00236000	20252.0000	47.79472000
0.00235000	3628.0000	8.52580000
0.00230000	3628.0000	8.34440000

K线图

最新成交

价格 WETH	数量 LRC	LRC 撮合费
0.10000000	0.01200000	07-02 15:00
0.10000000	3.54962162	07-02 15:00
0.10000000	3.54962162	07-02 15:00
0.10000000	3.54962162	07-02 15:00
0.10000000	3.54962162	07-02 15:00
0.10000000	3.54962162	07-02 15:00
0.10000000	3.54962162	07-02 15:00
0.10000000	3.54962162	07-02 15:00
0.10000000	3.54962162	07-02 15:00
0.10000000	3.54962162	07-02 15:00
0.10000000	3.54962162	07-02 15:00
0.09486833	0.01863390	06-29 16:00
0.00018708	53.54160000	06-27 19:00
0.00068151	2.40000000	06-23 23:00
0.00068100	347.00000000	06-22 21:00
0.00067474	620.24208040	06-22 18:00
0.00068100	31.75162014	06-22 17:00
0.00136000	4.41176571	06-22 15:00
0.00136000	4.59365284	06-22 15:00
0.00068700	1869.00000000	06-21 20:00
0.00068744	523.00000000	06-21 19:00
0.00068744	325.00000000	06-21 19:00
0.00068744	350.00000000	06-21 19:00
0.00068744	488.00000000	06-21 19:00
0.00068744	408.00000000	06-21 19:00
0.00068744	637.00000000	06-21 19:00
0.00068200	253.00000000	06-20 20:00
0.00068200	505.00000000	06-20 20:00
0.00068200	529.00000000	06-20 20:00
0.00068200	543.00000000	06-20 20:00
0.00068200	543.00000000	06-20 20:00
0.00068200	558.00000000	06-20 20:00
0.00068200	579.00000000	06-20 20:00
0.00068200	590.00000000	06-20 20:00
0.00073250	52.00000000	06-20 18:00

前端方案

Frontend Solutions

网页 DEX

网页 Wallex
Wallet + DEX

移动端钱包
Wallet App

开发工具包
SDK

网页 Wallex

Wallet + DEX

● Beta3

返回钱包

0xeba713...b65a00

● 观察模式

LRC-WETH

选择交易市场

0.00235499 ¥7.362

最新价

-97.65%

24H 涨跌

0.00235499

24H 最低价

0.10000

24H 最高价

0.05000 WETH

24H 成交量

0.00076905 ¥2.404

币安 市场行情

-0.56%

24H 涨跌

751.4

24H 成交量

买入 LRC	卖出 LRC	最新挂单	最新成交		
单价 ¥7.36		卖出价格 (WETH)	数量 (LRC)	总计 (WETH)	价格 (WETH)
0.00235499	WETH	0.04000000	1000.0000	40.0000	0.00235499
数量 0 可用		0.01047000	60.0000	0.6282	0.1
0	LRC	0.00900000	2284.0000	20.5560	0.1
0	25% 50% 75% 100%	0.00300000	17668.0000	53.0040	0.1
总计: 0 WETH ≈ ¥0	WETH 余额 0	0.00250000	13510.0000	33.7750	0.1
撮合费: 0 LRC ≈ ¥0	自定义 >	0.00236000	20252.0000	47.7947	0.1
有效时间: 1 天	自定义 >	0.00235000	3606.7685	8.4759	0.1
		0.00230000	3628.0000	8.3444	0.1
		买入价格 (WETH)	数量 (LRC)	总计 (WETH)	时间
		0.09486833	0.0186339	0.00018708	06-29 16:19
		0.10000000	0.1301	0.0130	06-27 19:33
		0.00035000	2146.0716	0.7511	06-23 23:02
		0.00010000	1715.4935	0.1715	06-22 21:21
		0.00005100	54100.0000	2.7591	06-22 18:25
					06-22 17:12
					06-22 15:34
					06-22 15:33
					06-21 22:24

提交订单

前端方案

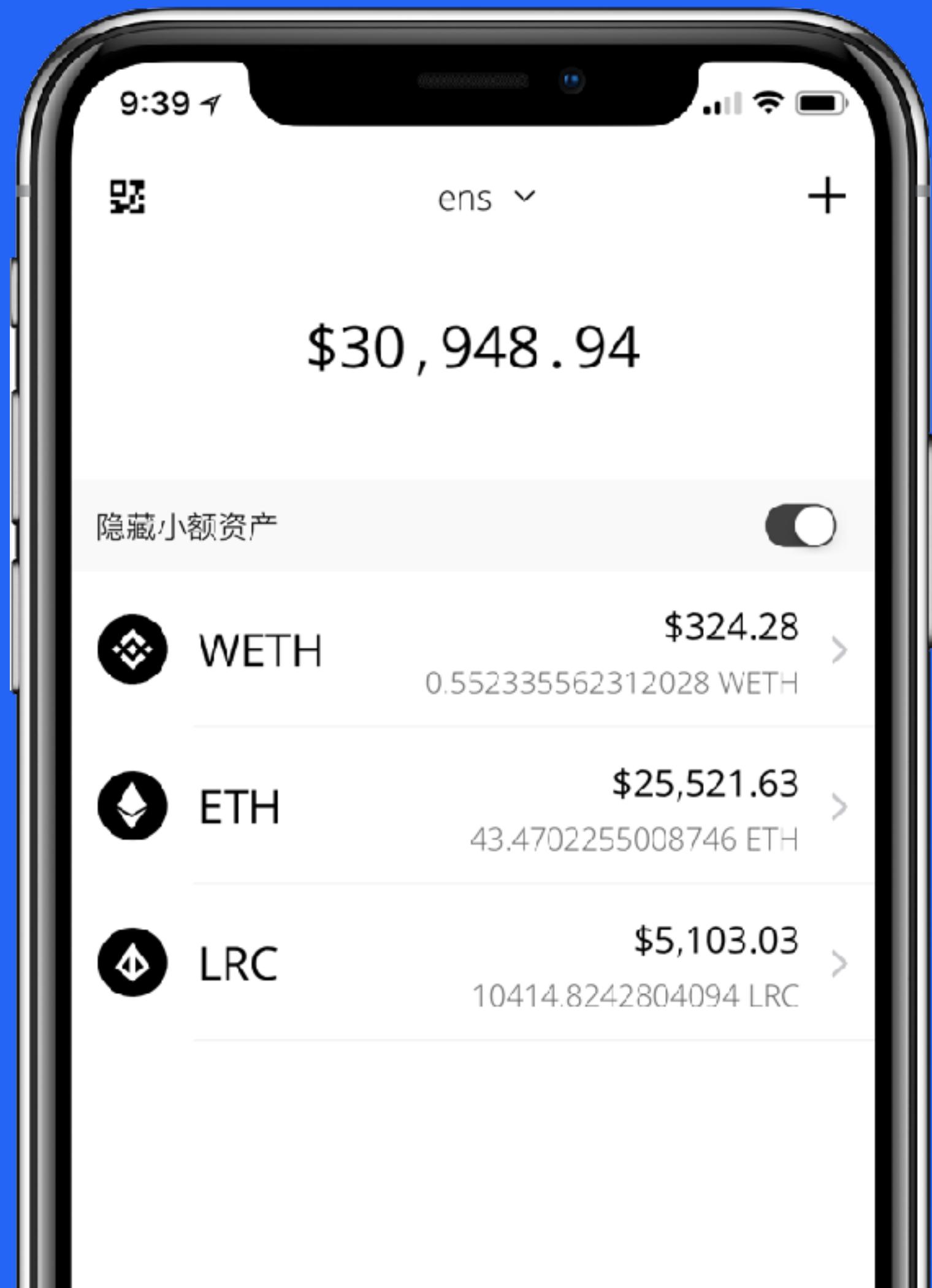
Frontend Solutions

网页 DEX

网页 Wallex
Wallet + DEX

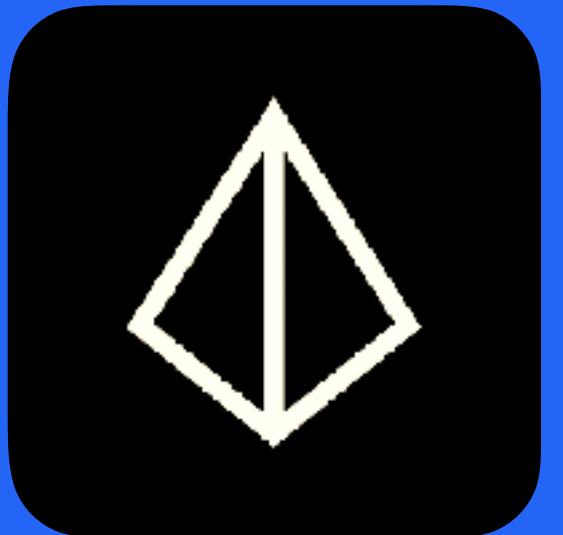
移动端钱包
Wallet App

开发工具包
SDK

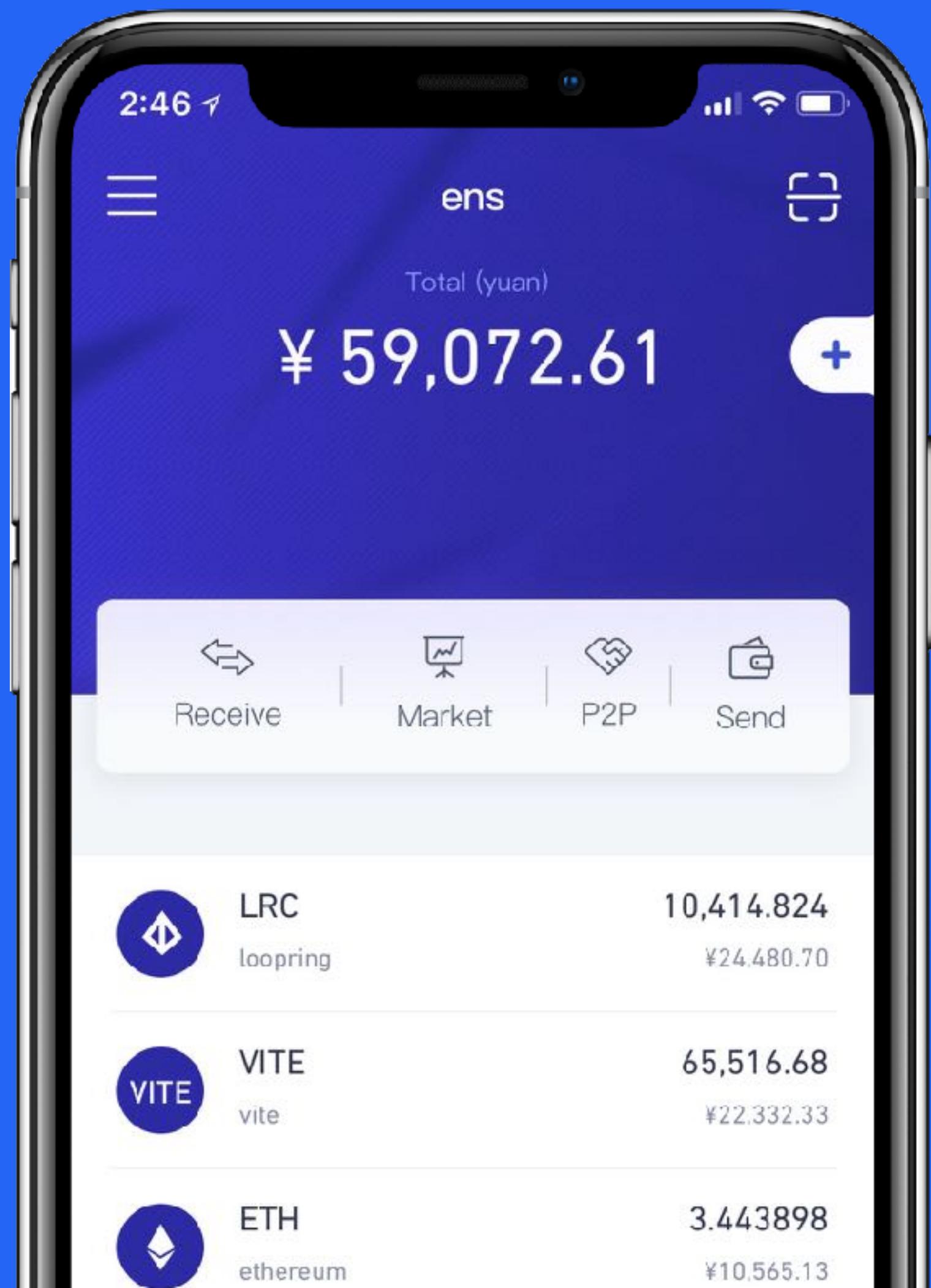


钱包

Wallet



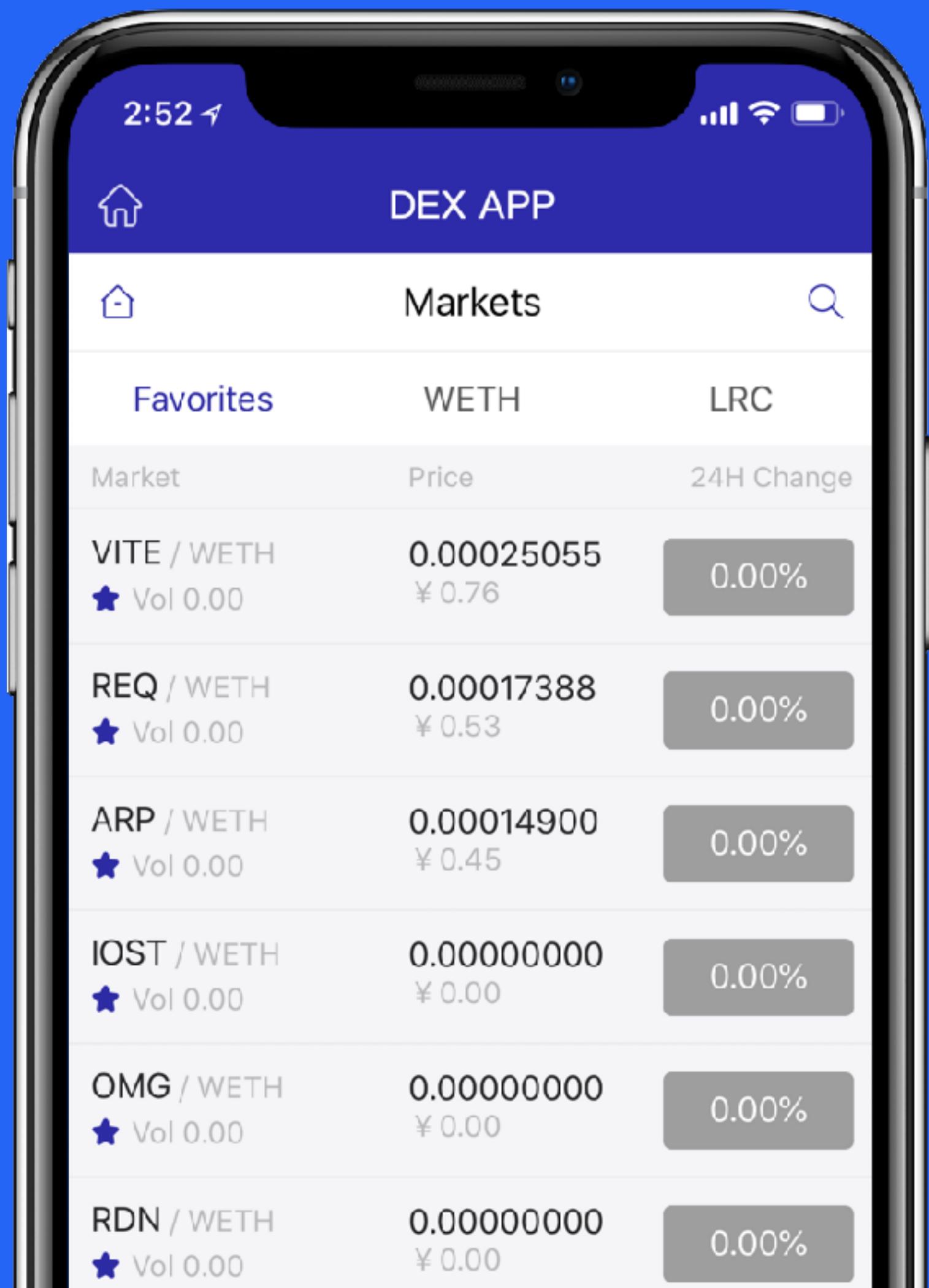
Loopr iOS



钱包
Wallet



Tokenest

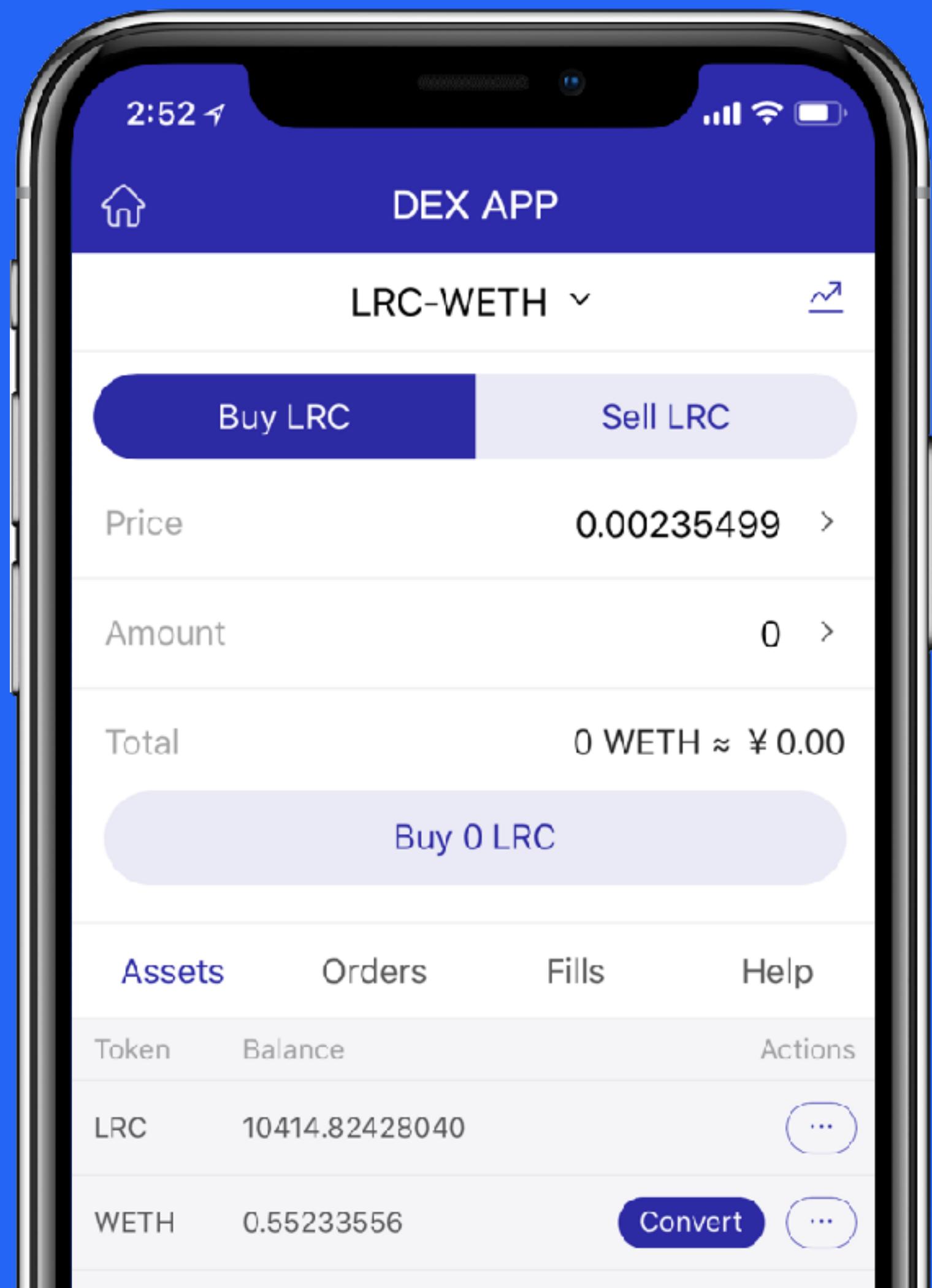


钱包 + H5DEX

Wallet



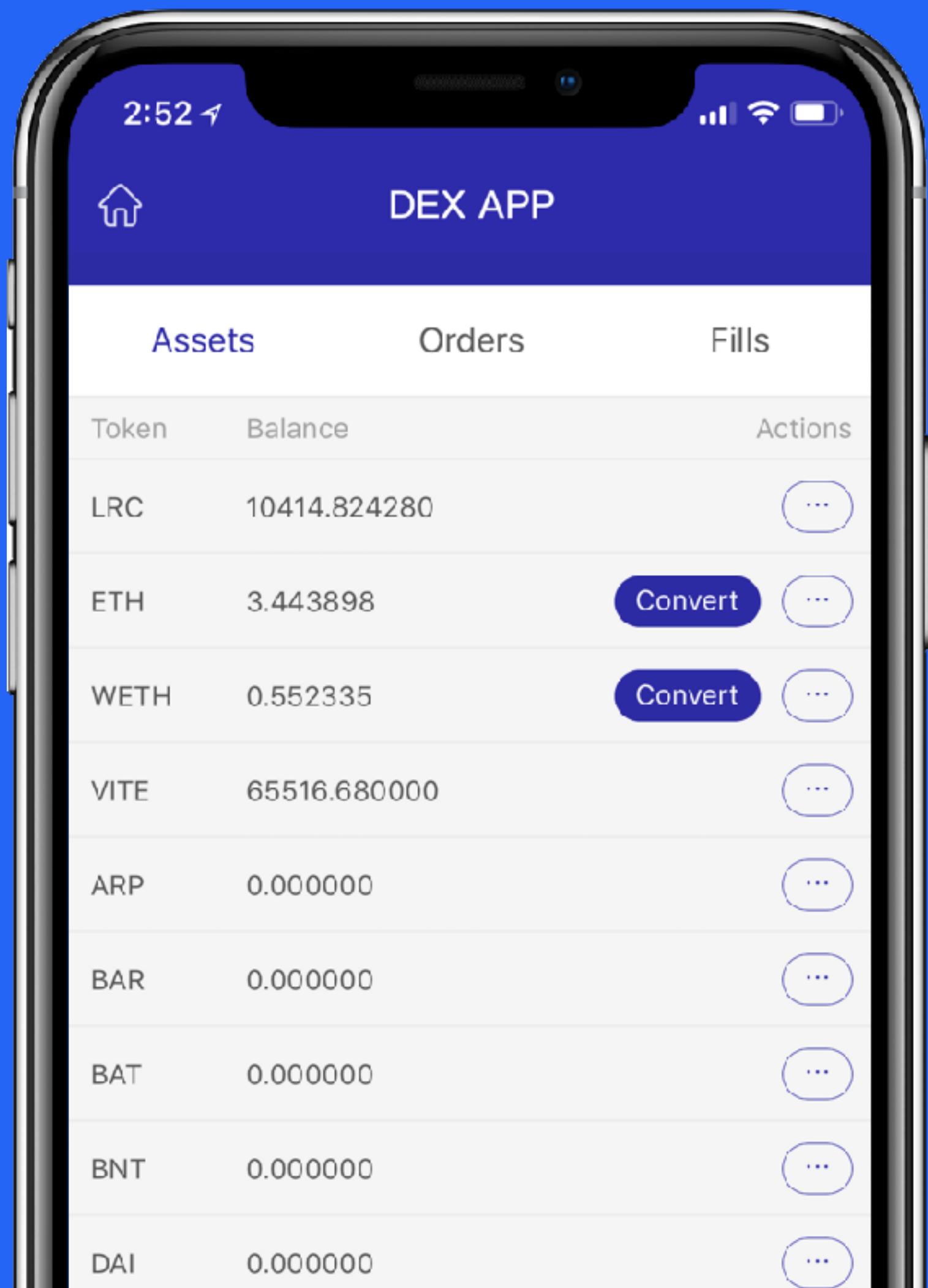
Tokenest



钱包 + H5DEX
Wallet



Tokenest



钱包 + H5DEX

Wallet



Tokenest

H5DEX + imToken



imToken



H5DEX + imToken



imToken

The screenshot shows a mobile application interface for a decentralized exchange (DEX) on the Loopring network. The top bar displays the time as 3:21 and the title "Loopring Dex". Below the title, the token pair "LRC-WETH" is selected. There are two main buttons: "买入 LRC" (Buy LRC) in blue and "卖出 LRC" (Sell LRC) in grey. The interface includes fields for "价格" (Price) set at 0.00235499, "数量" (Quantity) set at 13510, and a total amount of "总计" (Total) 31.8159149 WETH ≈ ¥ 97616.77. A large blue button at the bottom is labeled "买入 13510 LRC" (Buy 13510 LRC). Below the input fields, there are three circular icons: a downward-pointing arrow, a double-headed arrow, and an upward-pointing arrow. The transaction details section shows "买入" (Buy) 13510 LRC, "卖出" (Sell) 31.8159149 WETH, "价格" (Price) 0.00235499 LRC-WETH, "LRC 撮合费" (LRC Matchmaking Fee) 83.03 LRC, and the "订单有效期" (Order Validity Period) from 07-04 15:21 to 08-04 15:21. At the bottom, a note states "① 签名和下单不会消耗油费" (① Signing and placing orders will not consume gas fees).

H5DEX + imToken



imToken



移动端钱包
Wallet App

H5DEX

计划开源：08/2018
Open Source in 08/2018

前端方案

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网页 DEX

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前端方案

Frontend Solutions



JS SDK



iOS SDK



Android SDK

已经开源

计划开源 08/2018

计划开源 Q4/2018

前端方案

Frontend Solutions

网页 DEX

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...

还有更多
More to come

网页 DEX

网页 Wallex

Wallet + DEX

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开发工具包

SDK

...

助力流量变现 | 20%撮合费用

Help Monetizing Traffic

Receiving 20% of Matching Fees

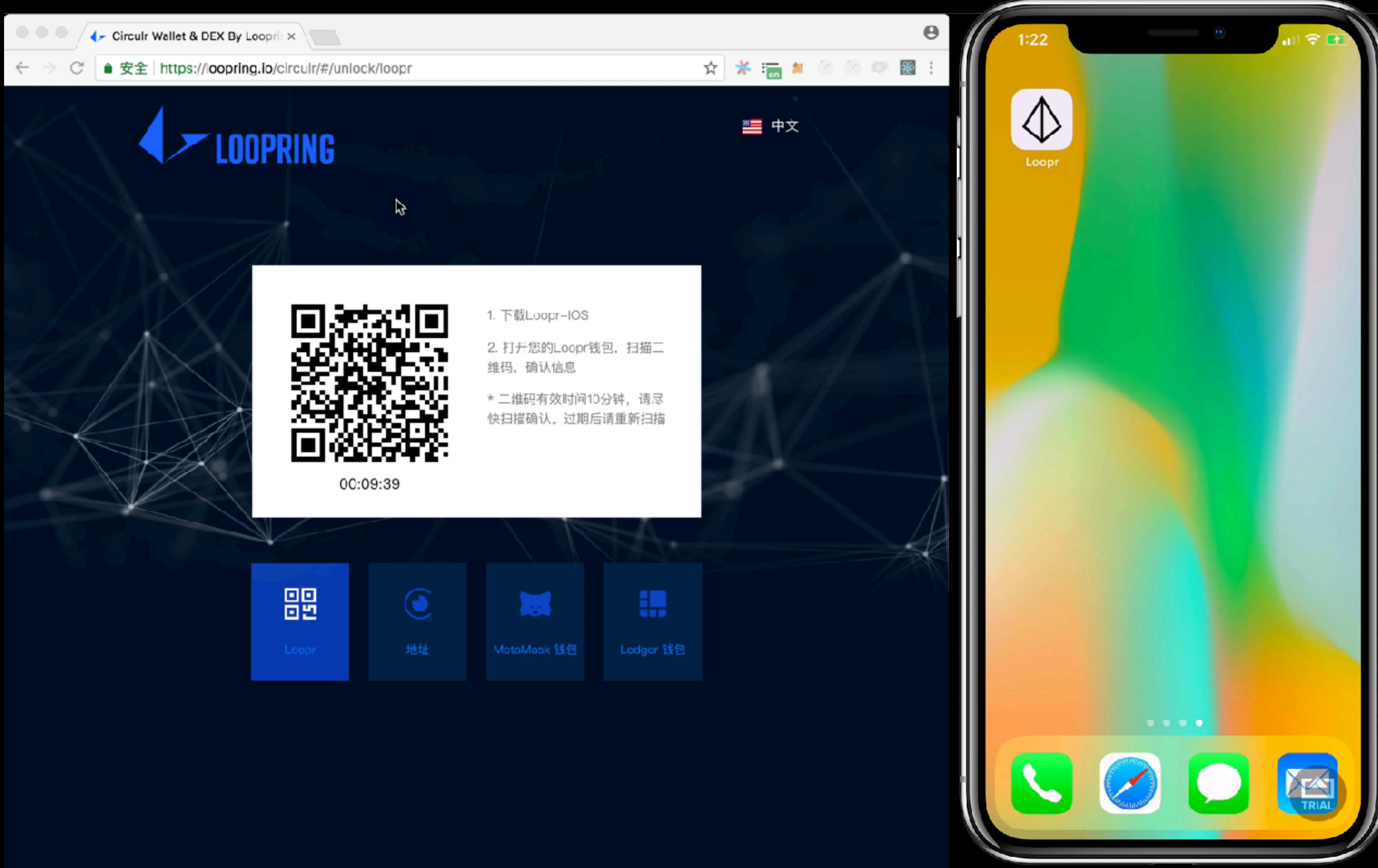
OTC 扫码交易

Trust-less OTC Trade



WEB扫码授权交易

Web + Wallet Trading



DEX解决方案

DEX Solutions

中继方案

Backend Solutions

中继方案

Backend Solutions



吴晓露/后台工程师

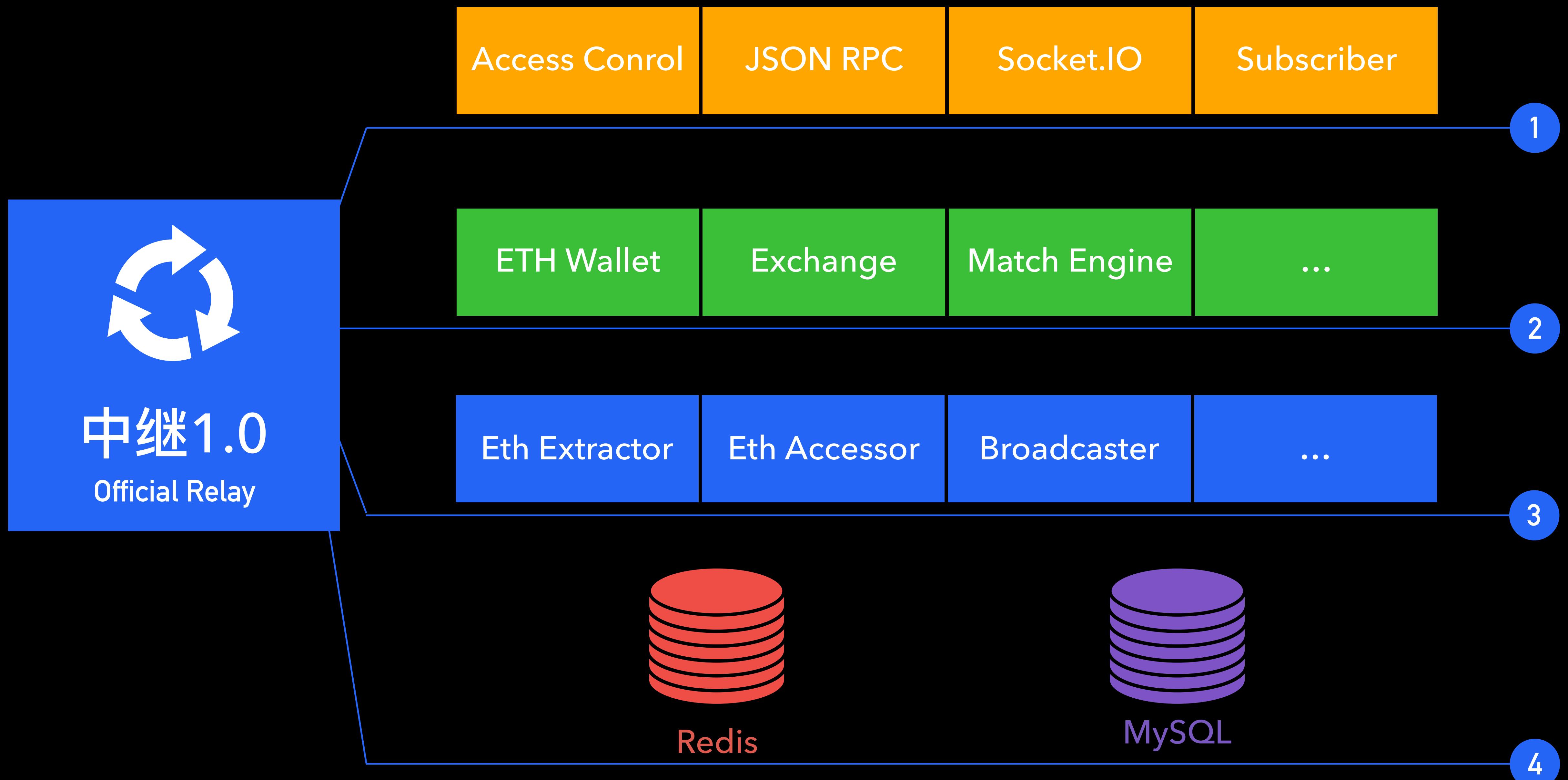
Xiaolu WU, Backend Developer

中继方案

Backend Solutions

撮合即服务

Matching-As-A-Service



中继 | AWS部署

Relay Clusters | Deployment

12 台微服务集群节点

Micro Service Cluster Nodes

15 台中间件和数据库集群节点

Middleware & Database Servers

5 台以太坊全节点

Ethereum Full Nodes

100+ CloudWatch监控点

Cloud watch monitoring points





水平可扩展/10万个交易对
Scalability with at least 100K Trading Pairs

支持动态交易对配置
Add/Remove Trading Pairs without Restarts

单交易对每秒5000次撮合
5000 Matches per Second per Trading Pair

阶段性开源
Open Source in Stages

高可用商业服务
Commercial HA Services



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Open Source in Stages

高可用商业服务
Commercial HA Services



基于AKKA框架

Powered by AKKA & Event Sourcing



光锥中继

Lightcone Relay

上线

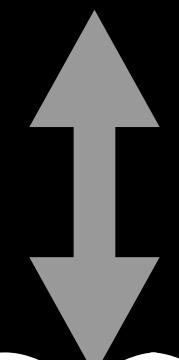
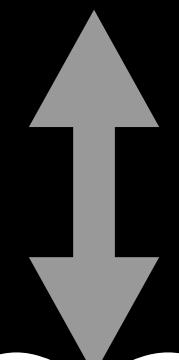
Launch

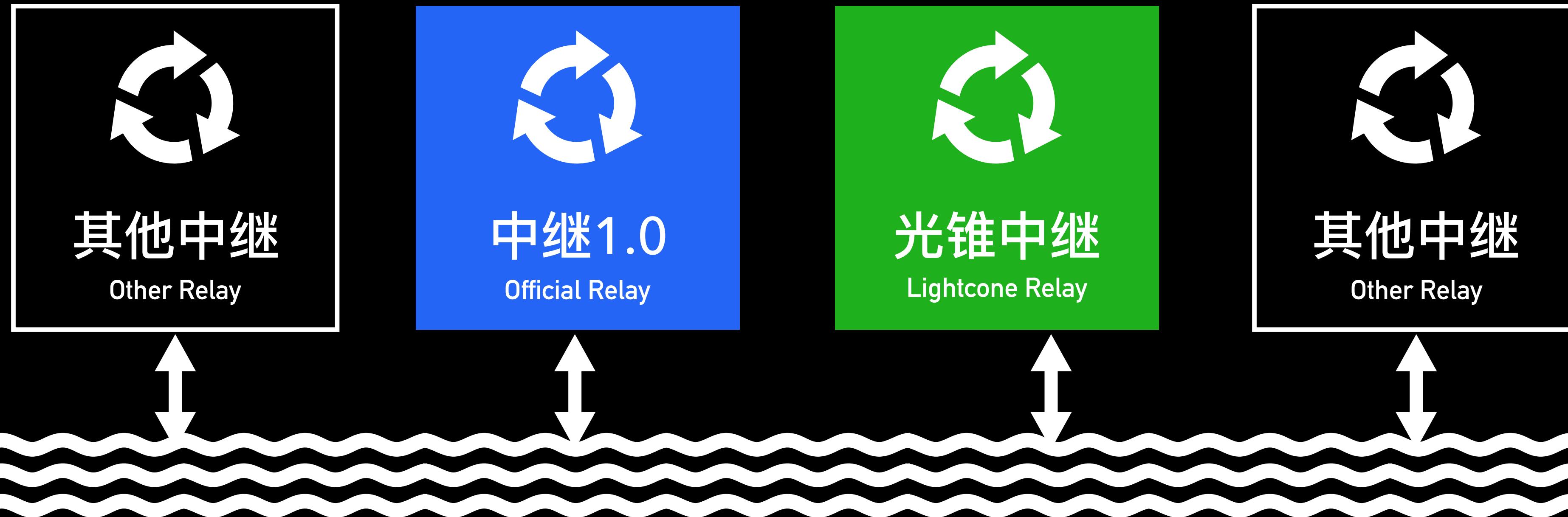
11/2018

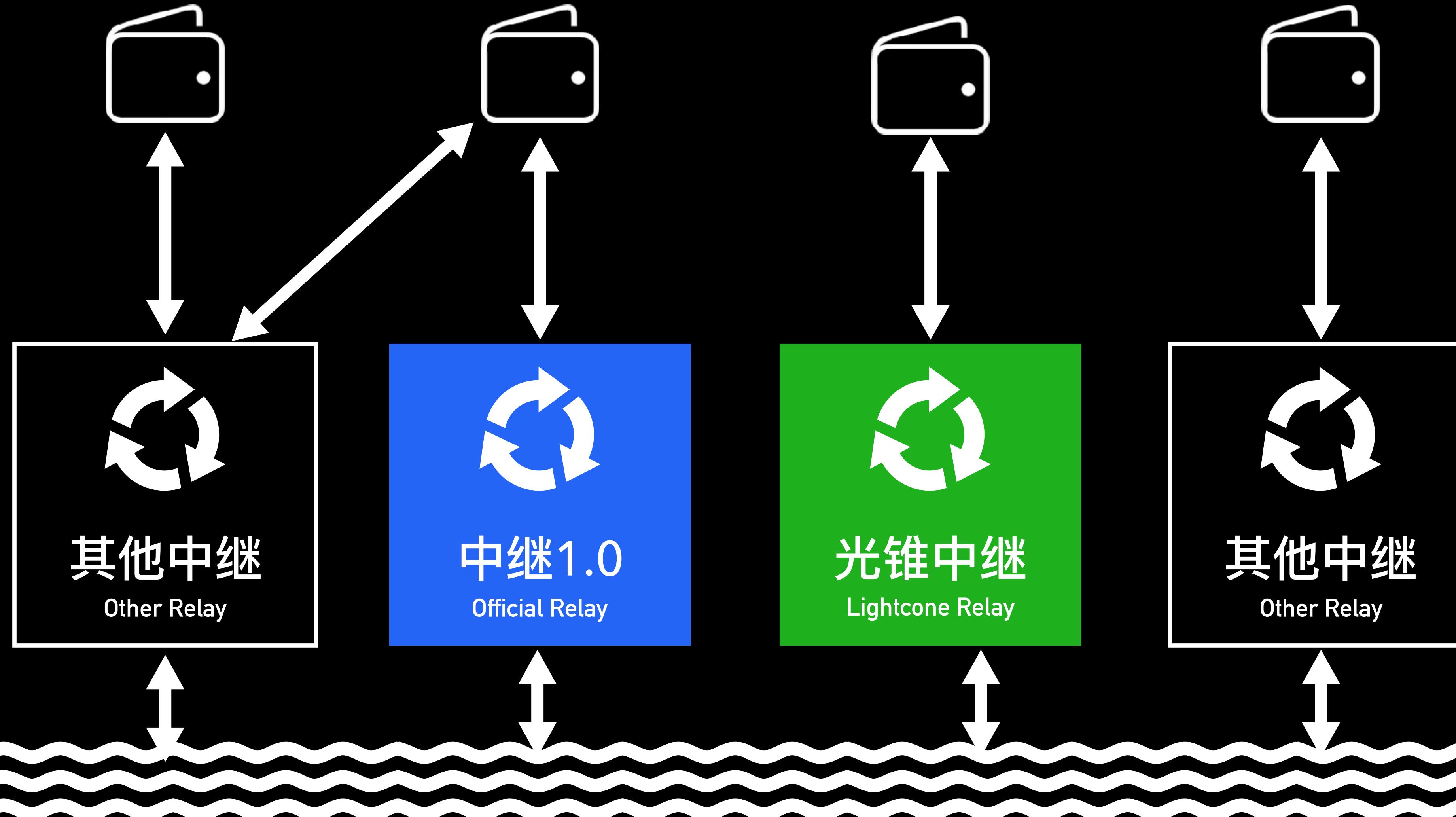


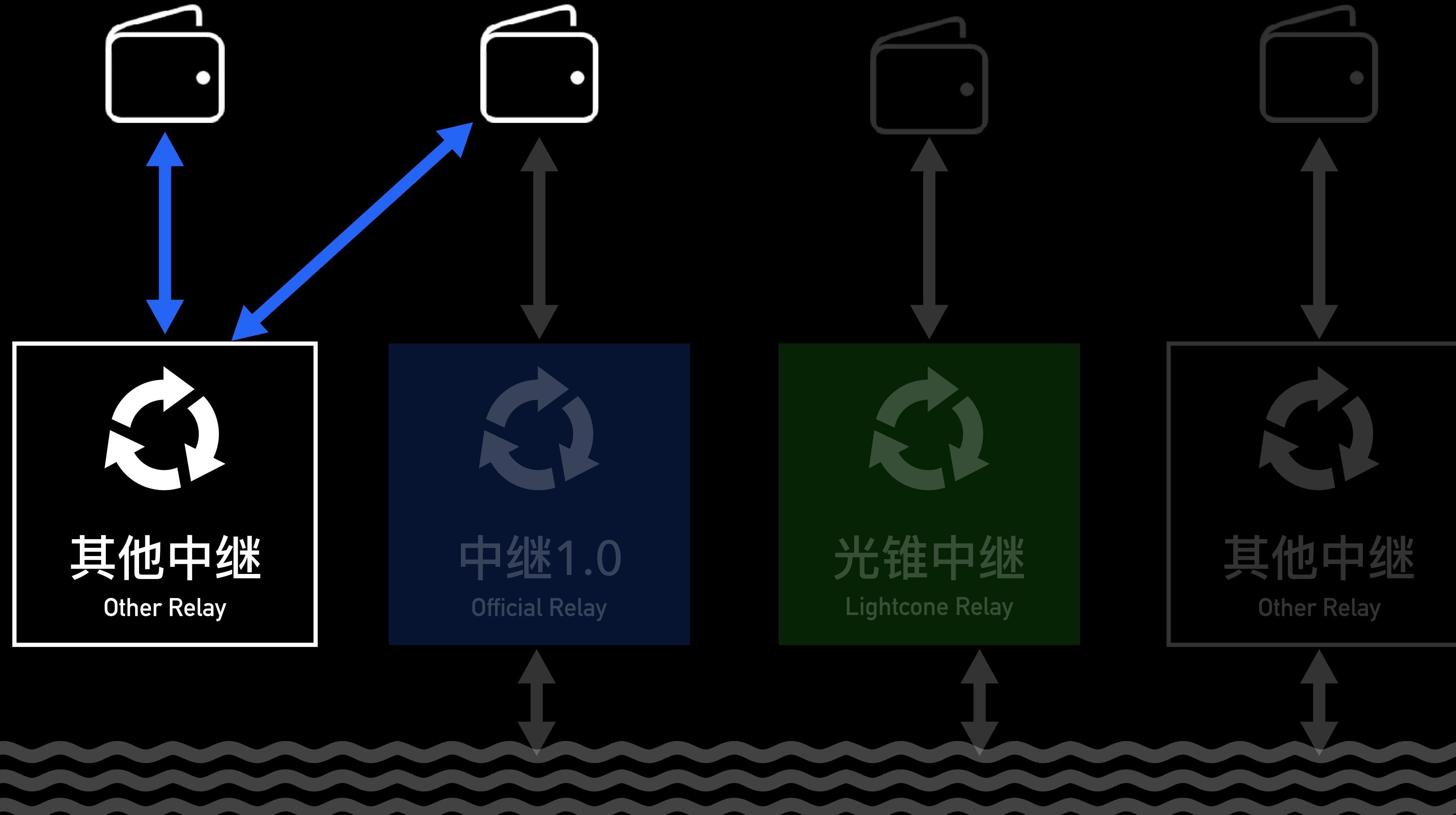
中继间流动性共享

Inter-Relay Liquidity Sharing

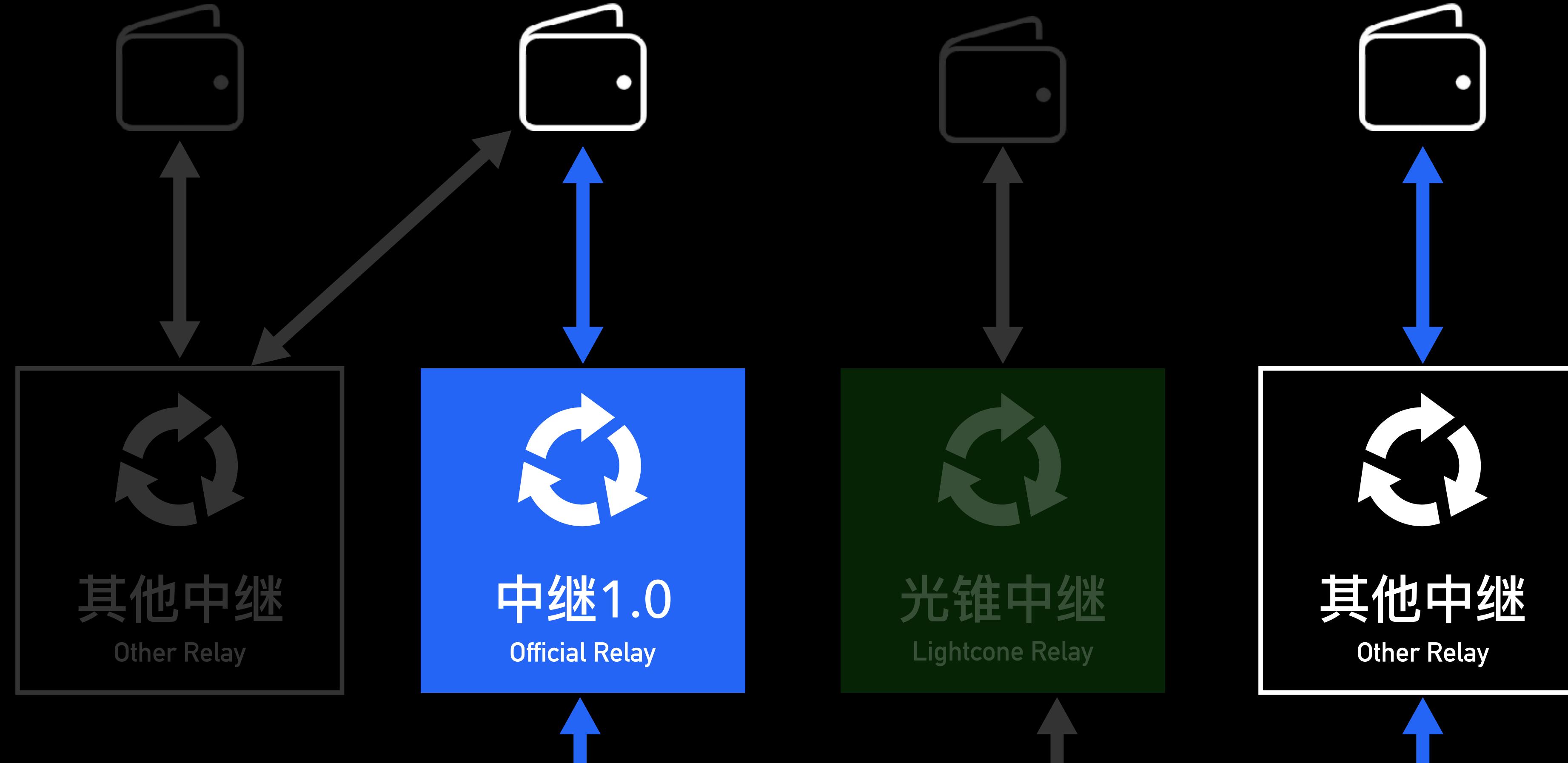








第一层流动性共享
Level 1 Liquidity Sharing



第二层流动性共享
Level 2 Liquidity Sharing

中继间 流动性共享

Inter-Relay
Liquidity Sharing

中继流动性共享网络

Inter-relay Shared Liquidity



08/2018



开发者入口

Developer Portal

The screenshot shows the Loopring Developer Portal homepage. At the top, there's a navigation bar with links: ABOUT, LEAF, TEAM, RESOURCES, DEVELOPER PORTAL (which is underlined), NEWS & UPDATES, and a button labeled LOOPRING WALLET. Below the navigation, there are four small links: OVERVIEW, PROTOCOL, DOCUMENTS, and FAQ. The main content area has a large blue header "DOCUMENTS". Below it, a text block says: "Below is documentation for various topics. These documents are hosted on GitHub and are constantly updated." Under "DOCUMENTS", there are three sections: "PROTOCOL", "FRONTEND", and "TABLE OF CONTENTS". The "PROTOCOL" section lists links to the Loopring whitepaper, Ethereum protocol implementation, and NEO protocol implementation. The "FRONTEND" section lists links to the Loopring.js library, Loopr wallet, CircuItr frontend, h5dex, and several Chinese links related to DEX solutions. The "TABLE OF CONTENTS" sidebar is a blue box containing links to Protocol, Frontend, Backend, Miscellaneous, and Contact Us.

ABOUT LEAF TEAM RESOURCES DEVELOPER PORTAL NEWS & UPDATES LOOPRING WALLET

OVERVIEW PROTOCOL DOCUMENTS FAQ

DOCUMENTS

Below is documentation for various topics. These documents are hosted on GitHub and are constantly updated.

PROTOCOL

- [Loopring whitepaper](#)
- <https://loopring.github.io/protocol>: the Loopring Protocol implementation on Ethereum.
- <https://loopring.github.io/neo-protocol>: the Loopring Protocol implementation on NEO.

FRONTEND

- <https://loopring.github.io/loopring.js>: the Loopring Javascript library built for accessing the Loopring Protocol.
- <https://loopring.github.io/loopr>: web-based Loopr wallet.
- <https://loopring.github.io/circuItr>: web-based DEX frontend circuItr.
- <https://loopring.github.io/h5dex>: embedable DEX solution h5dex.
- [DEX solution h5dex](#)
- [web-based DEX frontend circuItr](#)
- [web-based wallet Loopr](#)
- [Loopring Javascript library](#)

TABLE OF CONTENTS

- Protocol >
- Frontend >
- Backend >
- Miscellaneous >
- Contact Us >

loopring.org/developers

路印2.0研发

Protocol 2.0 Design

路印2.0研发

Protocol 2.0 Design



钟孔亮/智能合约工程师
Kongliang ZHONG, Smart Contract Developer

路印1.0

Protocol 1.0

链外撮合/链上实时清算
Offchain Matching/Onchain Settlement

对称性环路多订单撮合
Symmetric Multi-Order Ring-Matching

双重验证防抢先交易称
Anti Front-running Dual-Authoring

路印1.0
Protocol 1.0

链外撮合/链上实时清算
Offchain Matching/Onchain Settlement

美/欧/日/韩
US, EU, Japan, Korean



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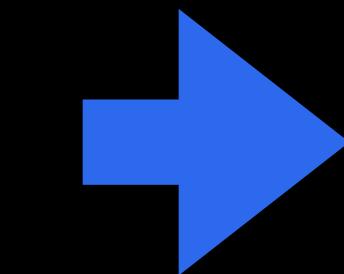


双重验证防抢先交易称
Anti Front-running Dual-Authoring

路印1.0
Protocol 1.0

路印1.0

Protocol 1.0



路印2.0

Protocol 2.0

全新设计

Complete Redesign

路印2.0
Protocol 2.0

链外撮合/链上实时清算
Offchain Matching/Onchain Settlement

对称性环路多订单撮合
Symmetric Multi-Order Ring-Matching

双重验证防抢先交易
Anti Front-running Dual-Authoring

环路数据压缩技术

Ring Compression Technology

多环路撮合

Multi-Ring per Tx

多种订单授权方式

More Ways to Authorize Orders

支持链上订单

Onchain Orders

免申请代币自动注册

Token Auto Registration

JavaScript参考实现

JS Reference Implementation

通用签名规范

Multihash Support

可配置拦截器

Interceptor Support

更丰富灵活的费用模型

More Flexible Fee Model

路印2.0

Protocol 2.0

协议2.0发布

Protocol 2.0 Launch

09/2018





LOOPRING

A black and white photograph of a rugby scrum. Several players in blue and white uniforms are huddled together in the mud. One player in a pink and black vest stands to the right, looking towards the action. In the background, there are other players and a blue tent.

路印去中心化交易联盟

The Loopring DEX Alliance

共建

Build

共赢

Win-Win

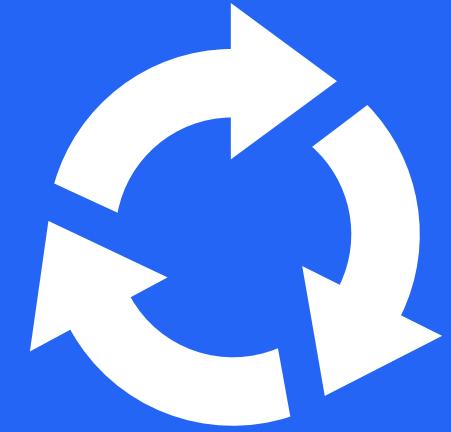
开放

Open



路印去中心化交易联盟

The Loopring DEX Alliance



“引导”中继

Bootstrapping Relay

bootstrap.loopring.io

路印去中心化交易联盟

The Loopring DEX Alliance

去中心化交易所/钱包
DEX & Noncustodial Wallet

去中心化交易做市商
DEX Market Makers

独立中继运营商
Independent Third-party Relayers



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每周免费上ERC20新币（协议层）

Free Weekly ERC20 Token Registration (Protocol Level)

每周免费新增交易对（中继层）

Free Weekly Listing (Relay)

非盈利/100%返利

Non-Profit/100% Revenue Share

与UpBlockchain光锥中继共享订单

Share Liquidity with UpBlockchain Lightcone Relay Cluster

免费咨询和技术支持

Free Consulting and Technical Support

路印去中心化交易联盟

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0%



社区空投

Airdrops



社区空投

Airdrops



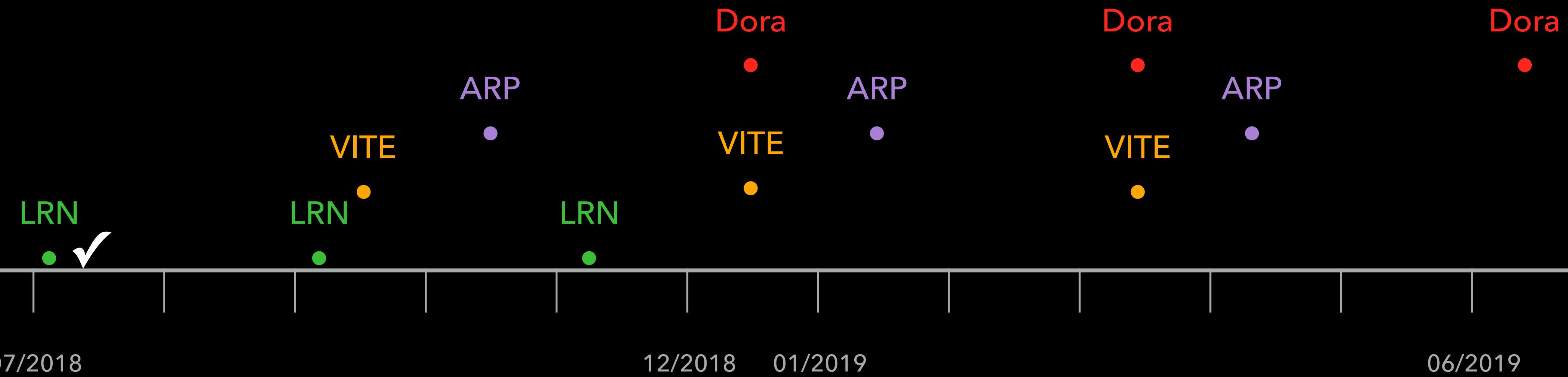
空投LRN总量60%

Airdropping 60% of LRN Total Supply



社区空投

Airdrops



空投Dora总量5%
Airdropping 5% of Dora Total Supply

340
天/DAYS

20

核心工程师
Core Developers

25

代码库
Repositories

2797156

代码
Lines of Code

84

博客
Medium Posts

340 天/DAYS



我们刚刚开始
We are just getting started



<https://loopring.org>