

EXECUTIVE SUMMARY

crypto asset marketplace

1. Abstract

Ripa Exchange is a hybrid-decentralized exchange with a strong focus on lowering the entry level of opening new exchanges and giving crypto traders safe and secure trading partners to operate on a daily basis.

The team of RipaEx believes that, despite the recent developments in the world of cryptocurrencies, it is still expensive to open, manage and build trust on a newly created exchange not only for the resources need to run a reliable exchange platform but also for the build of the platform itself and to find the liquidity necessary to run a profitable business in the first 5 years gap.

Action is needed and action is needed now. Users are frustrated with unreliable exchanges that run away with their funds, got hacked or does not sustain the load of a growing industry of today. Despite the effort of exchanges managers to offer efficient, reliable, and easy to use platforms to trade entry prices for building such platforms is in the rage of 250-300 thousand euro and that does not include personnel cost to give platinum customer support, platform infrastructure and daily expenses for the business. All of that for then having an decent exchange platform for which you will need to pay an external software company to make changes as you request.

It is the aim of this project to give you an Open Source, efficient, reliable exchange platform and to give the needed liquidity¹ to your newly created exchange from day **one** so you can focus on finding your customers, give platinum support and comply with all the heterogeneous laws in the industry. As we want that the customer experience will be the sleekest possible, while making it safer to trade.

¹Thank you to the RLSP (Ripa Liquidity Service Provider) technology



2.1 Key Terminology

RIPA EXCHANGE: a FIAT ⇔ CRYPTO exchange (a cryptocurrency exchange) based on the source code of Peatio

RIPA BLOCKCHAIN: a DPOS blockchain in which liquidity is shared for all the exchanges in the Ripa network

RIPA TOKEN - XPX: a cryptographically secure token exchanged on the Ripa blockchain based on the DPOS protocol

RIPA: the DPOS financial ecosystem composed of Ripa Exchange and Ripa Blockchain

RIPAEX: the name of the project, project website and hosted domain

RLSP: Ripa Liquidity Service Provider, a shared orderbook to exchange orders and liquidity between exchanges in the same Ripa network

RIPAEX ICO: the name of fixed exchange rate token exchange period composed of both the phases of PreSale and RIPA TEC

ARK: a platform for consumer adoption of blockchain technologies

ACES: Ark Contract Execution Services provides simple protocols and tools for building a robust blockchain service marketplace based on the ARK SmartBridge technology

"," OR ".": The Anglo-Saxon use of decimal points and commas to represent numbers has been chosen for the purposes of this document: that is to say that a "." represents a decimal point, and a "," distinguishes between multiples of thousands, millions and billions.

2.2 Roadmap

There are essentially four phases to the RipaEx project:

FUNDING THE PROJECT: XPX PRESALE AND RIPA TEC (WP2)

This phase recognizes the existence of interest in this market development from across the World concerning the lowering of the entry level for building a cryptocurrency exchange.

PHASE ENDING JANUARY 2019.



FIRST EXCHANGE OPENING AND DEVELOPMENT OF TOOLS AND RESOURCES (WP3)

The second phase takes the results of the first and develops from them a set of tools and resources which provide concise and comprehensible guidance to market actors in any Country. With the first instance of Ripa Exchange running we can make first contact with other economical players in the industry.

PHASE ENDING JUNE 2019.



DISSEMINATION (WP 7/8) AND PROJECT COORDINATION (WP1)

During the full duration of the project, dissemination activities (WP 7/8) are carried out in which results from the individual work packages are disseminated to relevant target groups including project partners, RipaEx investors, exchanges managers, banking partners as well as relevant target groups.



DEVELOPMENT OF HYBRID-DECENTRALIZED EXCHANGE (WP 4-6)

Using the tools and resources developed in WP3, Work packages 4-6 focus on bringing collected knowledge and tools into practice. The three work packages reflect three major focal points (and target groups) within the network of exchanges created for establishing successful demonstrations on a local scale: incorporations of local Ripa Exchanges (WP4), technical analysis for the Ripa Liquidity Service Provider (WP5), and first MVP of the hybrid decentralized exchange (WP6). The demonstration phase forms the heart of the RipaEx action; WP 2 and 3 are focused on providing deliverables (e.g. tools) that enable successful and efficient demonstration activities.

PHASE ENDING JANUARY 2021.

2.3 RipaEx Governance

Creation of a new Ripa Exchange in the Ripa network, release of RCF funds for the creation of new exchanges will be decided with a majority voting system among all the delegates of the Ripa network. The customization of the individual exchange instance, otherwise, will be decided exclusively from the company that manages that single exchange instance.

The RipaEx project will be incorporated as a collective interest company for profit as soon as the Ripa Blockchain will be stable, instead the company Ripa Exchange Ltd will manage the first individual crypto asset marketplace instance that will be opened to public in the first quarter of 2019.



3.1 Mission

"Our mission is to build the world best open source crypto asset marketplace with a high performance trading engine and safety which can be trusted and enjoyed by users. Additionally we want to move the crypto currency exchange technology forward by providing support and add new features. We are helping people to build easy their own exchange around the world."

Help is greatly appreciated, feel free to submit pull-requests or open issues in our GitHub repositories.

3.2 The Ripa Exchange

3.2.1 Features

A free, transparent and internationalized open source crypto currency exchange.

OPEN SOURCE O

All source code are fully released under the terms of the MIT License.

Ripa Exchange is a customizable cryptocurrency exchange solution architecture enables easy connection to KYC/AML, authentication, ETL/reporting, and other services.

COMPLIANT ✓

International KYC/AML standards.

Ripa Exchange KYC efficiently submits and exchanges KYC information to meet the banking supervisory standards and comply with Customer Due Diligence (CDD) requirements.

TRANSPARENT & CONFIGURABLE

Customize in your own way

Major functions have been embedded in the source code – neat registration and log-in interface, personalized deposit and withdraw procedure, best match of bid and ask, etc.

Internationalization



All users are able to view Ripa Exchange in a language to their best convenience.

Supporting many common languages.

PROOF OF SOLVENCY



Easy deployable PoS.

Ripa Exchange Proof of Solvency (PoS) allows users to verify the solvency of the Ripa Exchange based cryptocurrency exchange without compromising user privacy.

Easy currency configuration.

Ripa Exchange allows to create multiple accounts and trading in multiple currencies. Ripa Exchange makes it is easy to trade different currencies.

MULTI-ACCOUNTS ENTERPRISE FUNCTIONAL & USERS (Exchange 🏛 Intuitive Q Easy account configura-Start small, grow big. For the new trader, for the tion. experienced trader. Ripa Exchange enterprise exchange features include a high-performance Ripa Exchange allows to create multiple login accounts Google, Facebook, Twitter and FIDO Alliance login standards to Clean, user friendly registration and matching engine, scalable distributed login interface. Personalized deposit worker threads, and SMS 2-factor and withdraw procedure and a built-in authentication. proof-of-solvency audit.

3.2.2 Features at Launch

At the first working Ripa Exchange instance opening the following features will be functioning:

- CRYPTO ⇔ CRYPTO:
- OAUTH: Facebook, Google, Twitter
- FIDO: login with FIDO Alliance standards
- PROTOCOLS: POW, DPOS, Masternode, tether, ERC20
- CURRENCIES: BTC, ETH, DOGE, BCH, TUSD, ARK, LISK, SHIFT, RISE, KAPU, OXY, RIPA, promising ERC20 tokens
- MAIN MARKETS: BTC, ETH, ARK
- ORDERS TYPE: market, limit

3.2.3 Development Timeline

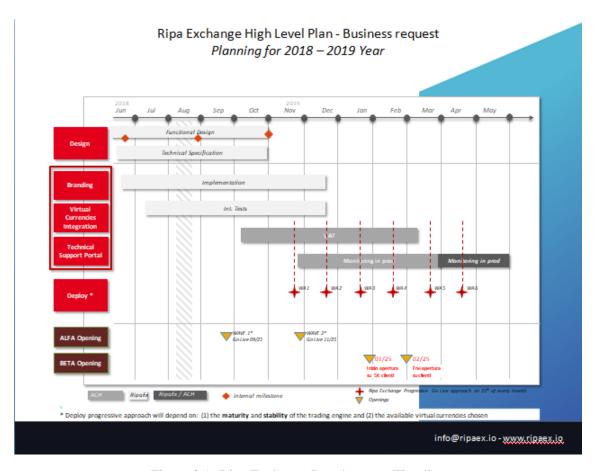


Figure 3.1: Ripa Exchange Development Timeline

3.3 The Ripa Blockchain

Ripa Blockchain, will inherits the Delegated Proof of Stake (DPoS) consensus system that was first introduced by BitShares. This consensus algorithm was designed to eliminate the issues associated with Proof of Work (PoW), namely the centralization of computing power and the exponentially increasing waste of real world energy. While not completely decentralized as it relies on consensus by a fixed number of elected delegates, it guarantees a better decentralization than Bitcoin. The consensus algorithm implementation is improved over time, evolving into an optimal consensus system.

The technical description of the Ripa blockchain is as follow:

- 1. DPoS (Delegated Proof of Stake)
 - 101 active forging Delegates
 - Delegates selected by vote mechanism built into DPoS
 - 115,000,000 XPX Seeded Genesis Block
- 2. Multi-signature accounts
- 3. Constant block reward
 - 2 ₱ per block
 - Inflation Rate (with 8s block times)
 - 6.31% for the first year
 - 5.93% the 2nd year
 - 4.02% the 10th year
 - 8-second block time
 - Decreased block time possible with future upgrades to the core.
 - 25 transactions per block
 - Increased via soft fork as needed.
- 4. Routing tables
- 5. SmartBridge data field for custom use and bridging blockchains (ARK Contract Execution Service)
- 6. Batch transactions¹
- 7. Custom transaction fees¹
- 8. Native smart contract execution²

3.3.1 Connecting Blockchains

ARK Bridged Blockchains (SmartBridge Technology)

The ARK Platform does not provide direct support for sidechains or dapp databases. Instead, a mechanism to bridge together blockchains is provided via a bridging function built into ARK Core where any blockchain can send and receive trigger function notices and informational data through the primary ARK network via custom developed **SmartBridge(s)** and **Encoded Listeners**.

¹Future upgrade: when ARK 2.0 will be released

²Future upgrade: when ARK Virtual Machine will be released

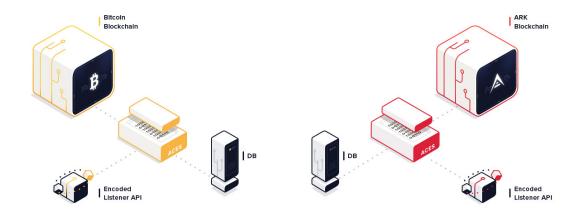


Figure 3.2: ARK-BTC A.C.E.S. SmartBridge Implementation Overview

3.3.2 Ripa Liquidity Service Provider (R.L.S.P)

Using the SmartBridge technology RipaEx will build a mechanism to share liquidity between all the exchanges in the Ripa network by writing the single exchange orderbook in the Ripa Blockchain and by executing order matching between all exchanges in the network.

In this way you can have the benefits of a decentralized orderbook (like liquidity) with the benefits of a centralized exchange (like platinum customer support and FIAT exchange).

3.3.3 Ripa Community Fund

To permits the birth of new exchanges in the Ripa network a Ripa Community Fund - RCF - is created with the following characteristics:

- Starting Principal: the RCF will have a starting operating capital of 5% (5,750,000 ₱) of the genesis block
- Recurring Participation: each delegate will contribute to the RCF with 5% of its forged XPXs

To obtain funds from the RCF to start your own Ripa Exchange you will submit your proposal in the official RCF section in the Ripa forum at anytime after the first Ripa Exchange instance will be operational.



4.1 Introduction

The RipaEx XPX token sale will be separated into two phases:

- PRESALE: that will run from April to June 2018
- **RIPA TEC**: that will run from July to December 2018

You can easily refer to both phases PreSale and RIPA TEC as *RipaEx ICO*.

4.1.1 RIPA TEC

Fund-raising through the RIPA TEC platform will follow the schedule:

- Exchange from 07/02/2018 to 07/15/2018: at the rate of ₱ /€0.0500 (100% bonus)
- Cooling-OFF from 07/16/2018 to 07/22/2018: at the rate of ₱/€0.05128205 (95% bonus)
- Exchange from 07/23/2018 to 08/05/2018: at the rate of ₱ /€0.05714286 (75% bonus)
- Cooling-OFF from 08/06/2018 to 08/12/2018: at the rate of ₱ /€0.05847953 (71% bonus)
- Exchange from 08/13/2018 to 08/26/2018: at the rate of ₱/€0.06666667 (50% bonus)
- Cooling-OFF from 08/27/2018 to 09/02/2018: at the rate of ₱/ \in 0.06802721 (47% bonus)
- Exchange from 09/03/2018 to 09/16/2018: at the rate of ₱/€0.07142857 (40% bonus)
- Cooling-OFF from 09/17/2018 to 09/23/2018: at the rate of ₱/€0.07246377 (38% bonus)
- Exchange from 09/24/2018 to 10/07/2018: at the rate of ₱/€0.07692308 (30% bonus)
- Cooling-OFF from 10/08/2018 to 10/14/2018: at the rate of ₱/€0.07751938 (29% bonus)
- Exchange from 10/15/2018 to 10/28/2018: at the rate of ₱/€0.08333333 (20% bonus)
- Cooling-OFF from 10/29/2018 to 11/04/2018: at the rate of ₱ / \in 0.08403361 (19% bonus)
- Exchange from 11/05/2018 to 11/18/2018: at the rate of ₱ /€0.09090909 (10% bonus)
- Cooling-OFF from 11/19/2018 to 11/25/2018: at the rate of ₱ /€0.09174312 (9% bonus)
- Exchange from 11/26/2018 to 12/09/2018: at the rate of ₱ /€0.0952381 (5% bonus)
- Cooling-OFF from 12/09/2018 to 12/16/2018: at the rate of $P \neq 0.09615385$ (4% bonus)

Coins distribution will be available at the end of each trading day and performed automatically through the RIPA TEC platform. Minimum threshold to reach is 25 BTC.

As the XPX exchange rate is calculated against the Euro currency directly you are guaranteed to not loose any invested fund during the sale period as the XPX tokens will be listed on our exchanges at the beginning of 2019 directly with the same \P / \in 0.10 exchange rate agreed during the token sale-ICO phase.

RIPA TEC platform will be available at the following link after July 2018:

TEC.RIPAEX.IO

follow us on Facebook, Twitter, Telegram, Slack and all of our official social channel to know when RIPA TEC is starting!!

4.2 XPX Ripa Token Distribution

115,000,000 XPX tokens are seeded into the genesis block: distribution of the XPX tokens generated are described into figure 4.1 and table 4.1.

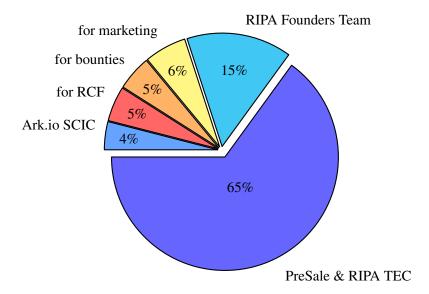


Figure 4.1: Ripa token distribution

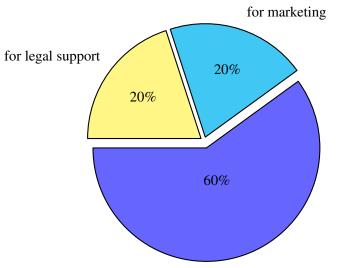
Percentage (%)	Quantity (₱)	Purpose
65	74,750,000	to distribute in PreSale and RIPA TEC
15	17,250,000	to RIPA Founders Team
6	6,900,000	for marketing
5	5,750,000	for bounties
5	5,750,000	for Ripa Community Fund - RCF
4	4,600,000	to Ark.io SCIC

Table 4.1: Ripa token distribution

Tokens not sold during the phases of PreSale and RIPA TEC will be burnt forever to permits and equal distributions of the funds and avoid speculations on the token remaining.

4.3 Division of Funds

The funds collected during the PreSale and RIPA TEC phases will be divided as explained in figure 4.2 and table 4.2 below



for project development

Figure 4.2: Ripa division of funds

Percentage (%)	Purpose	
60	for project development	
20	for marketing	
20	for legal support	

Table 4.2: Division of funds

where the row "for project development" funds allocation is described in table 4.3 below.

Percentage (%)	Purpose
50	functional analysis, technical analysis, development, testing
20	technical support
15	infrastructure
10	security
5	analytics

Table 4.3: Project development focus



5.1 Project Milestones

Following the matrix of development per area of interest based on the funds collected during the phases of PreSale and RIPA TEC:

	25 BTC	50 BTC	250 BTC	1000 BTC
DEVELOPMENT	CRYPTO ⇔ CRYPTO exchange release with 25 cryptocurrencies supported and 3 main trading pairs	CRYPTO ⇔ FIAT exchange release with MasterCard prepaid card. 50 cryptocurrencies supported and 3 main trading pairs	Advanced trading features. Open of a second and third Ripa Exchanges to join the Ripa network	Open of ten Ripa Exchanges across the globe
MARKETING	Support from one agency, adv campaigns on targeted channels	Support from two agencies, adv campaigns pushing harder, store with RipaEx gadgets	International presentation event in London	Support from five agencies, targeting all UN countries, presentation event in Tokyo
LEGAL	Legal department working on AML/KYC international standards	Legal departments working on AML/KYC international standards in various locations around the Globe	Open of office in New York	Open of office in Tokyo, intergovernmental parnership for defining AML/KYC standards
BLOCKCHAIN	DevNET development for RLSP and future ARK releases	Contributions to ARK development for AVM	Contributions to ARK development for standard timing releases	Partnership with ARK for blockchain technology developments

5.2 Local Market Analysis and 5 Years Projection

Ripa Exchange on its opening at the beginning of next year and for all the year 2019 is to be expected to have the following operating numbers:

Registered Users: 5,00024/hours Volume: 25 BTCMonthly Volume: 750 BTC

Given a transaction fee of 0.20% the revenue for the first year of operation are expected to be in the

order of 180 BTC the outcome for the years 2 to 5 is expected to be in the rage described in figure 5.1

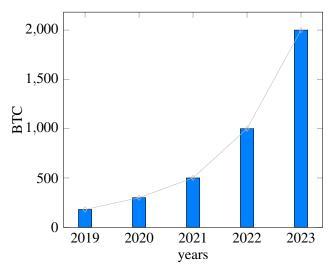


Figure 5.1: 5 years revenue projection

Depending on the closing value of the RipaEx ICO, the project is to be expected to open N.1 to N.9 others Ripa Exchange in the biennium 2019-2020 spreading the use of the Ripa Exchange codebase and the usage of the XPX token associated with the Ripa Blockchain making the figure above into account for each single Ripa Exchange installation.

5.3 XPX Token Economics

As explained in section 3.3 the Ripa Blockchain will have its own XPX token (P symbol) that will serve the following purposes:

- 1. to list new cryptocurrencies on Ripa Exchanges
- 2. to advertise new projects
- 3. to buy RipaEx gadget on RipaEx Store
- 4. to pay for the sell of goods & services on authorized resellers with our RipaEx POS (Point of Sale)
- 5. to share liquidity between Ripa Exchanges in the same network

It is our main purpose that the economy of the XPX token will stay healthy for all the duration of the RipaEx project for this reason we will apply economic strategies¹ to the token economy to make the price of the token rise constantly during all the duration of the project and beyond.

¹Like burning tokens not covered from ICO funds



6.1 Team

Giovanni Silvestri @ BitNow

FOUNDER AND CEO

10+ years experience in IT field,

4+ years in cryptocurrencies consultancy and exchanging,

2+ years experience in finance,

Location: Treviso (TV), Italy

₿ in **4**

Giorgio Isola @isolagio

FOUNDER AND CDO

10+ years experience in design,

4+ years in cryptocurrencies consultancy and exchanging,

Location: Milan (MI), Italy

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Luca Dordolo @gavrilobtc

ADVISOR

5+ years in cryptocurrencies consultancy and exchanging,

Location: Udine (UD), Italy

B 3 4

Freewillynow

COMMUNITY MANAGER AMERICA

2+ years experience in community management,

5+ years experience in cryptocurrencies,

Location: The Netherlands

1

Bitmyst

COMMUNITY MANAGER EMEA 2/2

2+ years experience in community management,

5+ years experience in cryptocurrencies,

Location: Italy

1

Goose

DEVELOPER - DELEGATE

1+ years experience in DPOS delegation,

8+ years experience in finance and or cryptocurrencies,

Location: United States

₿ 🔏

Antonello Arena @Darkital

FOUNDER AND CFO

10+ years experience in economics and finance,

4+ years in cryptocurrencies consultancy and exchanging,

Location: Potenza (PO), Italy

in 🖪

Propose your NAME here

CSO

3+ years experience in IT networking,

1+ years in network security,

1+ years experience in finance and or cryptocurrencies,

Location:

₿ in 🕢

Adriatic Crypto Hub

ADVISOR

5+ years experience in advisoring

5+ years in cryptocurrencies consultancy and exchanging,

Location: Pescara (PE), Italy

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OnlyTrifiz

COMMUNITY MANAGER EMEA 1/2

2+ years experience in community management,

5+ years experience in cryptocurrencies,

Location: Italy

₿ in 🖪

Warren Rogers @wazzy

COMMUNITY MANAGER AFRICA - ASIA

2+ years experience in community management,

5+ years experience in cryptocurrencies,

5+ years experience in IT,

Location: Czech Republic

in 🚀

Pimoussefrnl

DELEGATE

4+ years experience in DPOS delegation,

4

Bluedragon

DELEGATE

2+ years experience in DPOS delegation,5+ years experience in marketing,Location: United Kingdom

1

Toons

DEVELOPER - DELEGATE

10 years of experience in python development,

3 years of experience in structure design,

2+ years experience in DPOS delegation and cryptocurrencies

1

BitSnapp

DELEGATE

5+ years experience in software development,2+ years experience in DPOS delegation

Location: Italy

2

Amol

DEVELOPER - DELEGATE

1+ years experience Computer Engineering,

1+ years experience in DPOS delegation and cryptocur-

rencies

Location: Ahmedabad, India

₩ in <

Gandalf

DEVELOPER - DELEGATE

5+ years experience in software development, 1+ years experience in DPOS delegation

Location: United States

1

Nick_Bold

DEVELOPER - DELEGATE

10+ years experience in software development,

1+ years experience in DPOS delegation

Location: Italy

1

gobled

DEVELOPER - DELEGATE

10+ years experience in software development,1+ years experience in DPOS delegation

Location: Italy

1

Propose your NAME here

DEVELOPER - DELEGATE

1+ years experience in DPOS delegation,

1+ years experience in cryptocurrencies

Location:

¥ in ∕

6.2 Recommendations

If you are planning to start your own crypto asset marketplace you are invited to follow the following procedure to make your start-up plan a success in the Ripa ecosystem:

- 1. Submit your proposal to Ripa Community Fund by its official website¹ or by contacting us on our official social channels
- 2. Get the funds you need from RCF, Venture Capital or ICO
- 3. Decide the functional specifications of your exchange
- 4. Implement the exchange
- 5. Open to public

Following the procedure above you are likely to start a successful exchange for which you own the source code and which will generate revenues for your business action in the next 5 years.

It can't be stressed enough that if your intent is to open a FIAT \Leftrightarrow CRYPTO exchange you should focus first on law compliance by studying the AML/KYC laws of the country of incorporation and finding banking partners to work with. Local financial Authority can help to comply with rules & regulations and local cryptocurrencies foundations can help you to tune your exchanges operations to perform targeted operations based on the customers interests in the country of incorporation promoting cryptocurrency-friendly users in the area of interest.

Remember that RUNNING AN EXCHANGE IS HARD but we'll give you all the tools to start your entrepreneurship venture with all you need: source code, liquidity and financing will be available to you from day 1 of your trading operations so you can focus on giving platinum customer support, law compliance and partnering with financial institutions for the success of your entrepreneurship action.

YOUR SUCCESS IS THE SUCCESS OF THE RIPA EXCHANGE NETWORK and we want to achieve that with hard work and the most advanced technology in the industry for YOU and for the satisfaction

¹Available after March 2019

of the Ripa network clients.

6.3 Social

Please join our Telegram to give us feedback on the whitepaper.

To be part of our active community or learn more about what we do:

- Visit our website www.ripaex.io
- Join our Slack * ripaex.slack.com
- Follow us on Twitter ♥ twitter.com/ripaex
- Follow us on Facebook f www.facebook.com/ripaex
- Send Us an e-mail € info@ripaex.io

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