

CRYPTOPIA

Welcome to Cryptopia World, a persistent world, open-ended, multiplayer strategy and role-playing game that provides a solution to the problem of our unstable world economy. Built entirely on the blockchain, gamers can enjoy the security, visibility, and other benefits of this technology while having fun creating their own ideal society.

Premise

Years after the world economy removed fiat currency from the gold standard, economies are left vulnerable as the value of currency fluctuates according to market forces and government decree. Governments and the economic elite manipulate currency values for their own interests, allowing the masses to suffer economic upheaval and massive unemployment.

One powerful worldwide shock, like that of climate change, will bring about unprecedented economic collapse and human misery. This cannot be fixed with a policy change or climate accord. Society needs a reboot, a model for real change that will generate a secure, transparent, and trustworthy basis for both governance and commerce.

Our proposal: **Cryptopia**, a complete and fully functional city-state built on blockchain technology and cryptocurrency. A society free from any manipulative foreign power and fiat currency system, a place where citizens may create their own systems for governance, commerce, and way of life. Cryptopia will provide the world its reboot—a shining example that all societies may emulate.

Definitions

Local account	<p>Public/private key pair that is stored on your device. The account can be managed by the Cryptopia client or an external application such as Metamask.</p> <p>Your local account is used to sign transitions.</p>
Remote account	<p>Multisig account (wallet) that exists on the blockchain and accepts commands from one or multiple (2fa) connected local accounts.</p> <p>Your remote account contains data that other players can see such as your username and your faction.</p>
Blueprint	<p>Technical drawing for a specific type of building. It dictates the amount of natural resources, materials and products & the number of skilled builders that are required for construction. It can only be used once.</p>
Community Treasury	<p>This is a communal fund of Cryptos. After a favourable community vote, it can be used to further enhance Cryptopia World.</p>
Cryptos (CRYPS)	The native cryptocurrency in Cryptopia.
DAO	Decentralized Autonomous Organization.
Factions	<p>Group of players that share a vision on what the ideal new society should look like. Every player is a member of one of four factions.</p>
Fungible tokens	Interchangeable assets (tokens) such as IronOre (FE26) or Cryptos (CRYPS)
Marketplace	Application for gamers to exchange assets with each other.
Modules	NFT cards that represent enhancements for buildings or vehicles.
Module slots	Vehicles and buildings can have one or multiple module slots. In each module slot you can install a module card (NFT).
Non-Fungible tokens (NFT)	<p>This type of asset is specific and is not interchangeable with other assets of the same type.</p> <p>A title deed is an example of a NFT. When you own a title deed with the coordinates (5,10,-5) it cannot be interchanged with another title deed because that title deed contains other coordinates.</p>
Public Services	Governmental services that help structure the game.

Quests	Tasks that gamers may undertake for rewards.
Realm	Unique instance of Cryptopia.
Seasteading	The concept of creating permanent dwellings at sea, called seasteads, outside the territory claimed by any government.
Tax	Fees for the betterment of Cryptopian society.
Title Deeds	A digital document (NFT) that shows who owns a specific piece of land with the building developed on top of it.
Tokens	
Wallet	Secure storage for all Cryptos & Assets you earn or buy in the game. Your remote account is a wallet.
XP Points	Experience Points or XP Points show how active someone has been in gaming in Cryptopia World or posting at Cryptopia.com. XP points give Cryptopians benefits & support their ranking at Cryptopia.com.

Getting Started

Joining is completely free. To begin your new life as a citizen, download Cryptopia World from Cryptopia.com or Github. After installing your client software, you will be asked to create your account using the user-friendly, integrated wallet. You will also be requested to enter a 12-word secret key, which you need to record and keep secure.

As an independent city-state, Cryptopia World will welcome new citizens from every creed and country. This will be your new home.

- Your choices and actions have lasting consequences on climate, industry, agriculture, and landscape.
- Assets such as land, energy, and currency are limited.
- All citizens live in a single version of Cryptopia World and will be affected by the same events as they unfold.
- Cryptopians may vote on the main policies and regulations that govern Cryptopia World.

Citizenship

Now that you have signed up for Cryptopia World, you are now a citizen of Cryptopia! You will gain voting rights, your own wallet, and may accumulate both *Experience Points* and *Assets*. As a Cryptopian, you will be associated with one of four Factions, which will give you

purpose and the benefits of an alliance and cooperation with like-minded individuals (more on this later).

Experience Points (XP)

Citizens are given Experience Points (XP) in Cryptopia for completing quests, recruiting new Cryptopians, or being active in the Cryptopia.com forum and news platform. With XP, you can unlock new attributes, gain more influence in Cryptopia World, attain a higher rank which provides you certain benefits and may even get you a place on the top 10 leaderboard.

Note that you can only earn XP; you cannot buy or trade it.

Assets

You improve your economic status in Cryptopia World by acquiring assets. Assets are kept in your Cryptopia wallet and may be traded in the marketplace. Your complimentary boat allows you to travel and explore, and also serves as your initial residence and asset.

Fungible assets are interchangeable and non-unique, like units of wood or coal. Fungible assets are represented by ERC-20 tokens.

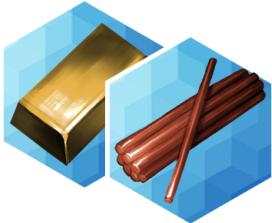
- **Natural resources** - acquired by owning a piece of land, then performing activities like exploring, farming, mining, drilling, or building a plantation.

Examples: Food, Sand, Wood, Uranium ore, Natural Gas, Oil, Iron Ore, Copper Ore, Gold Ore



- **Materials** - items that are made from natural resources that have been further refined through establishments such as factories or lumber mills.

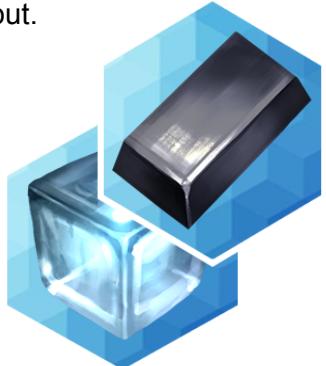
Examples: Gold bars, Lumber.



- **Products** - produced by factories that require natural resources, materials, and other products as input.

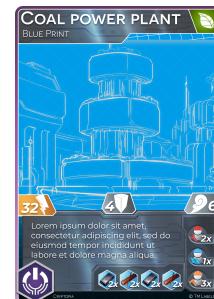
For example: Steel, Aluminum, Glass, Plastics, Concrete, Microchips.

- **Cryptos** - The national currency, Cryptos(ø) can be used throughout Cryptopia World and at the Cryptopia marketplace. Cryptos are the national currency in Cryptopia World. This fungible asset is represented by ERC-777 tokens that comply with the ERC-20 interface. You can earn Cryptos while playing the game or you can swap them with ETH at the marketplace. There is a maximum of 21,000,000 Cryptos available.



Non-Fungible assets are unique. Owners of land, for example, own specific, unique parcels of land. They are represented by Non-Fungible Tokens (NFT's) based on the ERC-721 standard and can be traded at the Cryptopia NFT marketplace, or at specialized 3rd party marketplaces like OpenSea. Non-fungible assets can differ greatly in value based on their rarity: Common, Rare, Legendary, Unique.

- **Title Deeds.** Title deeds are digital documents that prove ownership of real estate in Cryptopia. Each deed contains an ownership record for that plot of land, as well as details on the current building on it.
- **Blueprints.** Blueprints contain the architectural plan and list the resources, products, manpower, and expertise needed to create a building. Once the building is created, the blueprint is destroyed. You can buy blueprints for regular buildings at the NFT market. Special blueprints may be rewarded after a successful quest, or bought from another owner.
- **Modules.** These are enhancements to buildings and vessels. buildings and ships have module slots where citizens may install or switch modules around. Modules can be obtained as rewards from quests or through trade.
Examples: Storage module - increases storage; Speed module - increases your vessel's speed or your factory's production speed.
- **Housing.** You start off living on your boat, but as you grow more successful and gain more Cryptos in your wallet, you can move up to a more suitable dwelling on the map such as an apartment, house, villa, or condo. In your house, you can rest and work by accessing Cryptopia Job Boards. Or you can display any collected NFT art, decorate your home, and do other fun activities.



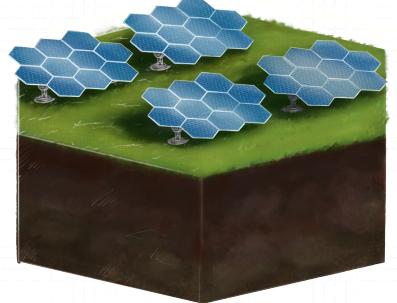
How to Play

Cryptopia gives you the freedom to create your new life as you please. You can become a tycoon and build your own empire, or you can start a career and be a highly sought-after professional.

The Tycoon Path

In order to start your journey as an industrial magnate, you need to obtain several assets.

Land. A precious commodity on a seastead like Cryptopia, all land may initially be bought at the Cryptopia Land Office. Afterward, Cryptopians can trade land with each other. You will be provided a title as proof of land ownership. All land starts with some natural resources, such as wood or oil.



Buildings. You may put up buildings to perform various functions. Factories, Lumber Mills, and Shipyards produce products for public use. Farms and plantations generate food and raw materials. Housing units provide shelter for citizens.

Mining. Essential for any new society, mining allows you to produce raw materials. To mine raw materials, you need to put up the correct mining facility. Once the facility has been built, it will take energy and workers to produce and sell your resources at the marketplace.

Staking Cryptos (POS). Crypto Stakers play a vital role in Cryptopian society; they check and verify the authenticity of all transactions before they go into the blockchain. In return for this service, they earn new Cryptos. You may put up a Crypto Staking Facility, where you or your workers can stake Cryptos. The more Cryptos you stake, the greater the chance that the facility will get to validate transactions and earn Cryptos in return (the 'Proof of Stake' principle).

Production. Once you've built your factory, farm, or power plant, you may start the production of goods. Hire Cryptopians to work for you in return for Cryptos. You will need to manage the influx of raw materials and products, your building's power requirements, and your employees' well-being.

Examples: Power plants require fuel to generate energy.
Farms require works to generate produce

Environmental factors

Various factors may impact your productivity. For instance, if there's a supermarket close to your location, your productivity will increase because of the morale effect of having more diverse food. Applying modules may increase production, storage space, or efficiency. The environment's higher CO₂ levels causing hotter temperatures can reduce the productivity of farms and plantations. Finally, faction zones impact productivity. A plant in an Industrial zone will have higher productivity.

The Adventure Path

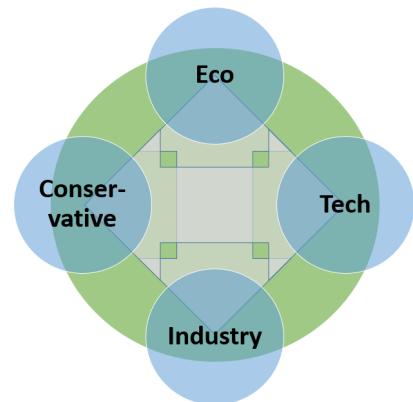
Another form of gameplay is to choose a career and develop your personal skills. Rather than staying put in one place, why not explore the world and monetize your skills. .

Quests. Complete Quests to earn XP, which lets you unlock new personal skills that will help you advance in your career. Participating in quests may also give you a chance to earn (potentially unique!) assets like blueprints.

Careers. Choose a career from one of many paths. Look at labor statistics on Cryptopia.com to show what careers are most in demand. As you develop in your chosen profession, unlock skills from your career tree and build towards a higher, better-paying position. For example: from builder, you can be promoted to architect or foreman. Just note that changing careers means starting from the bottom again.

The Factions

Join one of four distinct factions: Industrial, Eco, Tech, or Traditional. Each faction has their own philosophical and political ideas. They may cooperate, but often, they are at odds due to competing goals. The philosophy of each faction is all-encompassing but can be best summarized in five categories: Climate, Profit, Production, Science and Cooperation.



	Climate	Profit	Production	Science	Cooperation
Industrial	★★★	★★★	★★★	★★★	★★★
Eco	★★★	★★★	★★★	★★★	★★★
Tech	★★★	★★★	★★★	★★★	★★★
Traditional	★★★	★★★	★★★	★★★	★★★

- **Faction Leader.** As a faction member, you can discuss ideas and action steps with your fellow members on your forums, as well as elect a Faction Leader who will serve as the organization's representative.
- **Faction Advisor.** Every faction has an advisor who understands the faction's vision, values, unique strengths, and benefits. Advisors act to educate, advise, warn, motivate, and inform the player, particularly when it comes to the faction's goals. Where applicable, they can also explain general blockchain concepts.
- **Faction zones.** Depending on the faction, you can gain benefits by developing land within your faction zone. The more landowners of the same faction are concentrated in a given area, the larger the benefit to the faction zone.

Industrial faction

Goals: Profit and Production

Opposition: Eco Faction

"Leave the dreaming to the losers. As for us, we will roll up our sleeves and build up our factories. Our strategy? Who controls the resources, controls the world. Do you want to prosper in Cryptopia. Then think big, and go Industrial!"

Tech faction

Goals: Science

Opposition: Traditional Faction

"Humanity can and will innovate a way out of this crisis. Innovation and developing new technologies will improve our lives and create new markets. With renewable energy and gene technologies, we can improve the quality of life for all humans. So join us in making the world a better place—through Tech!"

Eco Faction

Goals: Climate

Opposition: Industrial Faction

"Life is not about short-term profits. We can and will do better. With work, we can create a society that works on renewable energy and carbon-neutral production. We need national parks and wildlife, not coal mines. Join us in this enlightened quest: to defend and restore Nature for a better future."

Traditional Faction

Goals: Cooperation, any objective its members desire

Opposition: Tech Faction

"Now more than ever, we need to stress the importance of family and community. It's all about decency, discipline, dedication, and respect for tradition. If we take care of each other, we can create a great society for everyone through cooperation and democratic processes. In this new world, everyone has a say."

Decentralized Governance

Cryptopia is envisioned to be a society that governs itself. Its citizens craft its own policies through a secure and transparent process. Policies go into effect only if approved by the majority.

Built on the Blockchain

A society built on blockchain technology has clear advantages:

- **Security.** As it is designed to operate on a peer-to-peer network, no single entity is in control of it, meaning less chance of manipulation.
- **Durability.** Cryptocurrency is durable and cannot be counterfeited.
- **Transparency.** A blockchain holds a transparent and full auditable public history of all transactions, making it ideal for transparent voting.

Multisig Wallets

Cryptopia offers multisig wallets. These multisig wallets consist of a *remote account* stored on the blockchain, plus one or multiple *local accounts* stored on the user's device(s). The multisig wallet has the same address regardless of the network (eg. Polkadot, Ethereum).

- **Multi-factor authentication.** To add a new device/ account, the consent of one or multiple devices (local accounts) is required. MFA is also applicable for transactions: for example, when sending large amounts of Cryptos to another user or third party.
- **2FA.** You can use the multisig functionality of the Cryptopia Wallet as a 2FA tool. By specifying that both your browser and your phone must approve a transaction before it is executed, you can provide higher security for your Cryptopia assets.
- **Multiple owners.** You can also decide to use the multisig functionality of the Cryptopia Wallet as a way to create a wallet with multiple owners. You can set it up such that every co-owner has to approve transactions before they are executed.
- **Recovery.** An account recovery process enables Cryptopians to restore access to the wallet that holds their funds, should their device break down.
- **Stand alone.** You can decide to start using the Cryptopia Wallet without becoming active in Cryptopia World. The wallet can be used with the same 2FA functionality—for example for trading at peer-to-peer exchanges on Polkadot.

Launch Fase 1 - EVM

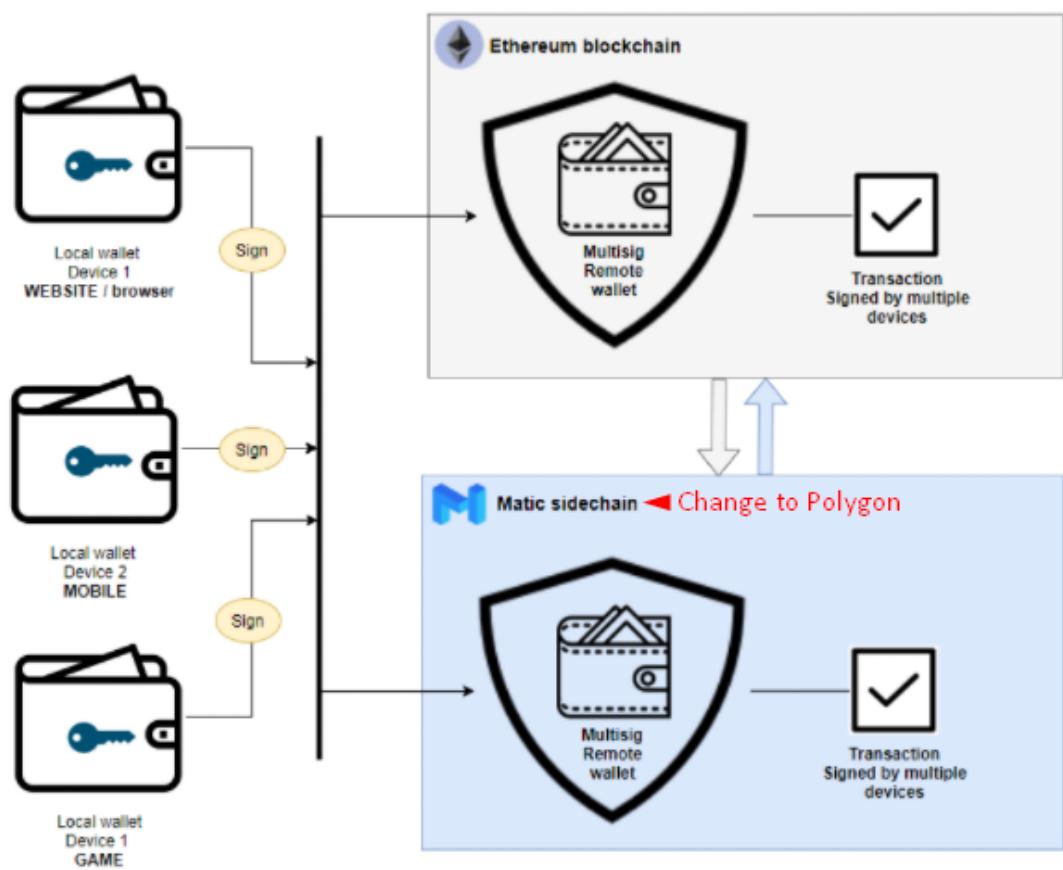
Initially Cryptopia will be launched on [Polygon \(Matic\) Network](#); but will be compatible with all EVM compatible blockchains, so other realms and blockchains can be added as we go.

Why Polygon

- **Speed.** Transaction speed
- **Security.** Modular security, provided either by Ethereum or by a pool of professional validators.
- **Fees.** Low transactions costs
- **Liquidity.** Using bridges to Ethereum.

Block Speed	1 p/s
Transaction speed	65.000 p/s

Polygon multisig wallet



Launch Fase 2 - Substrate (dedicated blockchain)

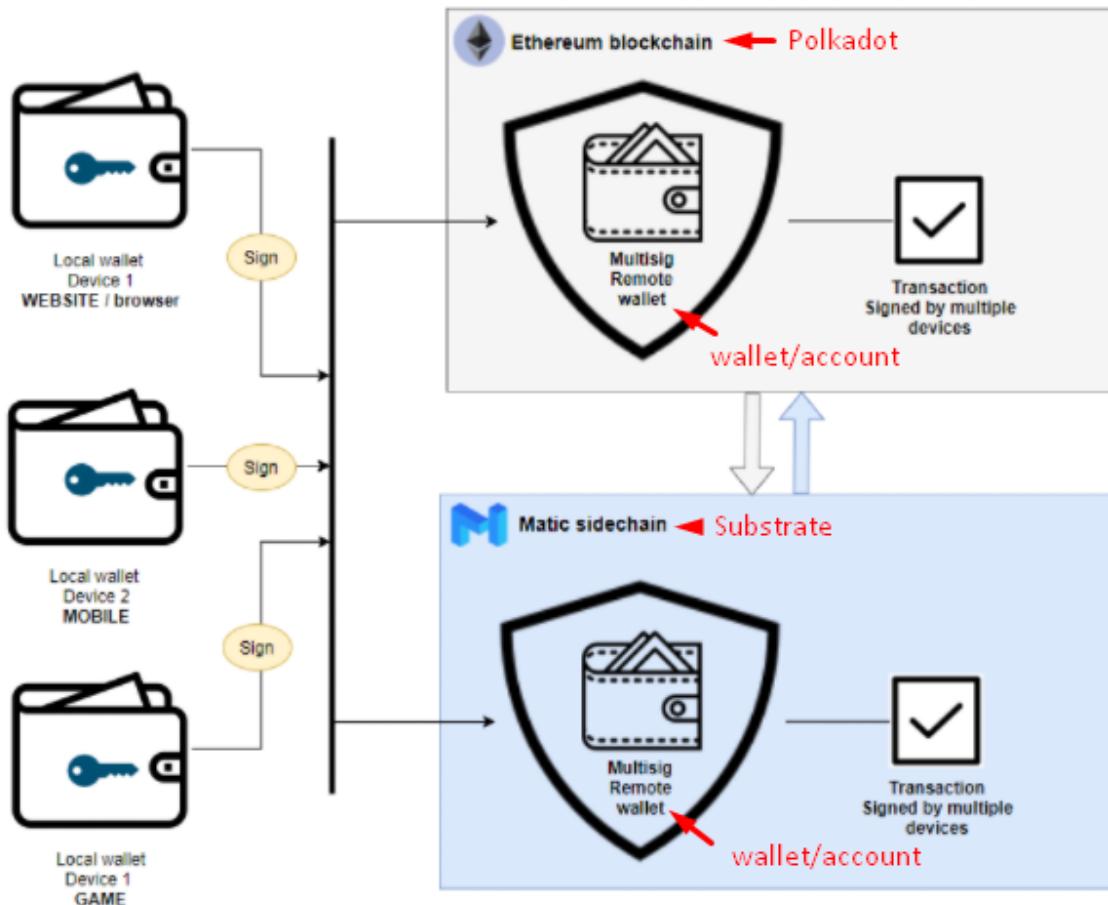
Cryptopia's dedicated blockchain will be built on [Substrate](#) and connected to [Polkadot](#) for liquidity and security.

Why Substrate

- **Fees.** Zero transaction costs and frictionless onboarding.
- **Speed.** Extreme transaction throughput.
- **Liquidity.** Cross-chain communication with Polkadot among others for liquidity.
- **Security.** As a Parachain, the Cryptopia blockchain enjoys the same security as Polkadot has to offer.
- **Governance.** The runtime code can only be updated after voting. Since the code is an integral part of the blockchain and there is no dependence on smart-contracts, hard forking is not required.

Block Speed	
Transaction speed	

Substrate Multisig wallet



Voting

Voting is how you exercise real influence in Cryptopia.

During the first phase after the launch of a new Cryptopia realm, the Cryptopia team manages functionality, the rules, and the balance among factions. But after this period, the community makes their own proposals to shape society. Faction leaders and owners of public services will decide which changes may be proposed to the community. Cryptopians who want to make proposals should contact their faction leader, who can present the proposal for them.

Adoption of these changes will require a **70% majority vote** of Cryptopians active in that specific realm. Votes are weighed based on the smallest of the weight (Cryptos and XP) that each voter has in their in-game wallet at the beginning or at the end of the voting period.

Public Services

Cryptopia World has 10 public Services with different roles, each represented by NFT tokens (ERC-271). Public Services have two sources of revenue:

1. They charge fees for the services they provide
2. They receive tax proceeds

Services include Decentral Government Building, Decentral Bank, Land Office, Police Head Office, Supreme Court, and more. For a full list, please refer to the Cryptopia whitepaper.

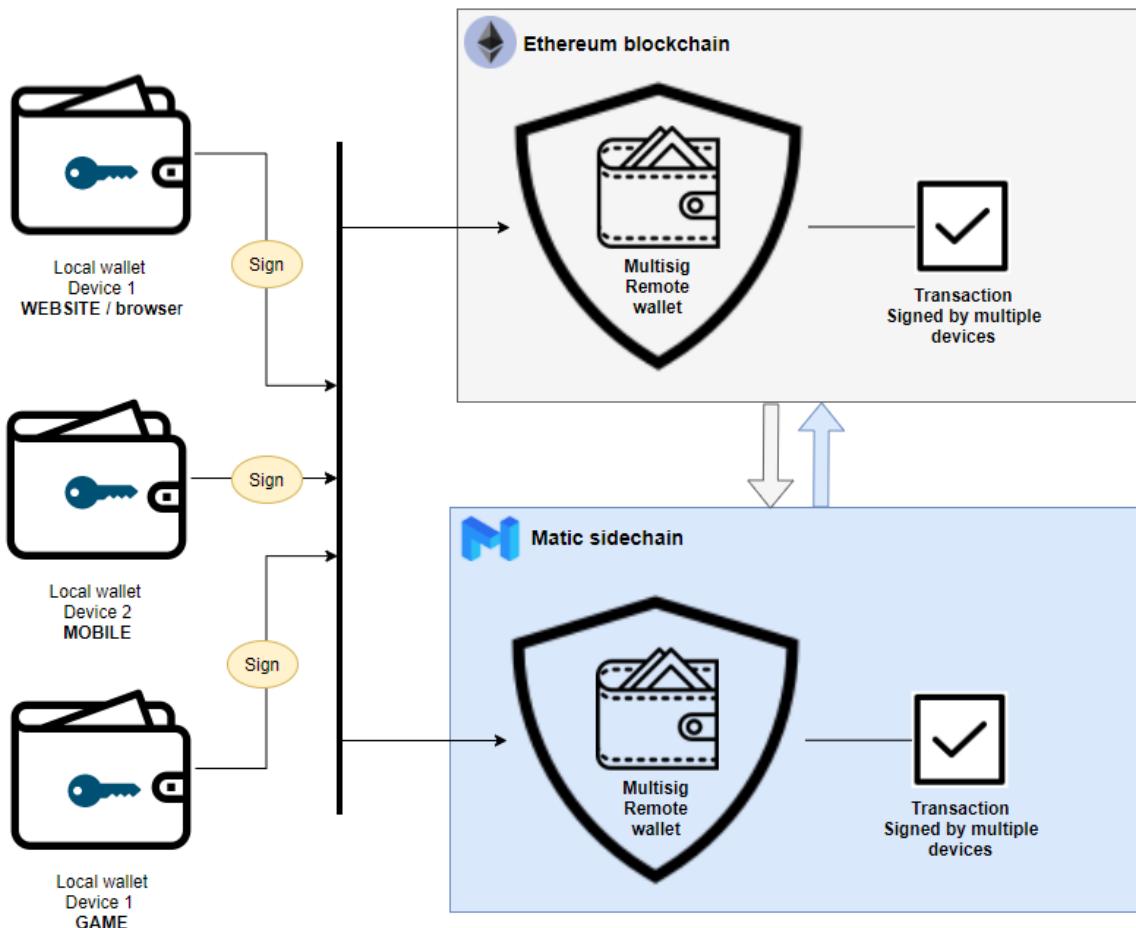
On Climate

- The climate affects everything and everyone in Cryptopia. High CO2 levels and wasteful methods cause environmental effects like rising sea levels, forest fires, polluted waters, and wildlife reduction.
- Climate changes directly affect the production levels of certain buildings. For example, solar panels (Eco) won't perform well with a lot of air pollution. On the other hand, fossil power plants (Industrial) are not affected by pollution.
- Climate is affected by CO2 levels, which is measured by Cryptopia's CO2 meters. The higher the level on the meter, the higher the CO2 emission tax levied on owners of CO2-emitting facilities, buildings, and vehicles. Don't like the tax system? The only way to change it is through a fair transparent community vote.
- If you own a CO2 capturing installation, like a nature park, you gain a tax benefit. The larger these parks get, the stronger their absorption rate. Therefore, the Eco faction can earn Cryptos with their Natural parks, next to the XP it gives them.

Cryptopia Wallet

In Cryptopia, your account is your wallet, which has Multi-sig baked into it. Safe, secure, and recoverable, you may use it as the in-game wallet but also as a dedicated stand-alone wallet.

Multisig Wallets



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Cryptopia Marketplace

Fungible and non-fungible assets are represented by tokens, which can be traded in three ways:

Swap Marketplace

The fungible tokens can be swapped at any time at the Swap Marketplace. The trading engine will maintain prices for all-natural resources, materials, and products to Cryptos based on market supply and demand. If, for example, you want to swap iron ore for glass, it takes the price from iron ore to Cryptos and the price of glass to Cryptos and calculates the going ‘conversion rate’ for this swap.

- No risk for arbitrage since all prizes are calculated in Cryptos.
- You can also swap ETH for Cryptos at the Swap Marketplace.
- It works with Polkapool, which is part of the Polkadex offering.
- No gas fees
- No frontrunning ('jumping the line' of people who want to buy a certain item by offering a higher transaction fee).
- All swaps are treated in a first-come, first-serve manner.

NFT Marketplace

The non-fungible tokens (NFT) can be put up for sale at the *NFT Marketplace*.

Players can decide to put their NFT's up for sale at the NFT Marketplace.

- Seller can choose among three pricing options: a ‘regular’ auction, a fixed price, or a Dutch auction.
- Bids can be placed in Cryptos and in ETH. Actual sales will only take place once the seller agrees with the price offered.
- You can continue to use the assets in Cryptopia World while you are waiting for a buyer offering the right price.

External Marketplaces

The non-fungible tokens can be sold via third-party *NFT auctions* like OpenSea.

As there will be a bridge, NFT tokens may be traded at specialized 3rd party exchanges on the Ethereum blockchain, like OpenSea. A description will be available so people know exactly what in-game asset the token represents. Once the buyer uploads the newly acquired token in his/ her game wallet, it can be used in Cryptopia World.

Cryptopia.com

Cryptopia.com is where you can download the game. It also serves as the social and support hotspot for the Cryptopia World community. Signing in requires a username, a unique security key (pin code or password), and their 12-word phrase. Users can create or connect their account seamlessly. The same remote account is used for the game, the wallet, and the website/community.

Social

On the Cryptopia.com community players may:

- share their milestones/progress, ideas, and thoughts
- Discuss actualities about Cryptopia and Crypto in general
- Give kudos/likes to comments which result in XP gains for the author.
- discuss NFT's that are offered on the marketplace
- hold a discussion among faction members in faction-restricted areas

There will be zero tolerance for bullying or extremism in any Cryptopia-governed media.

News and Stats

Cryptopia.com provides the latest news about all the latest developments in Cryptopia World. It provides notifications like new quests, new faction leaders, new industrial zones or natural parks, etc.

The *stats section* will include:

- The labor market: Cryptopian skill statistics and recently available jobs.
- Economic information: existing buildings by type, insights on production/demand for natural resources, materials, products, and going market rates.
- Details on the Community Treasury.
- CO2 levels in Cryptopia World.

Rankings and Reputation

Cryptopians will be ranked on Cryptopia.com based on their XP, their holdings, and tax paid. There will also be a ranking showing the relative strength of the four factions.

Support

On Cryptopia.com a Wiki, forum, and FAQs will be offered to solve any questions (potential) gamers have regarding Cryptopia.

Downloads

The PC/ laptop/ tablet client is available from Cryptopia.com and Github and works on Windows, Mac, and Linux. Regardless of platform, all gamers will access and live in the same Cryptopia World.

The Future

Depending on the available budget and priorities voiced by the community, a browser-based version of the game may also be developed. As mobile is an increasingly important segment of the gaming market, the development of an app version will also be placed as a potential development on the roadmap.

We lay the foundations before you to build the new world, but only you can steer its direction towards a brighter future.

Join us as pioneers of the new digital world with Cryptopia.