Particl Academy

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Particl

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Documentation for Particl Marketplace.

Particl Academy guides you to become an expert for e-commerce with the *Particl Marketplace*. It is a reference book in straightforward language.

Particl Marketplace is the most secure and private online marketplace on the web, putting you at the center. You become the Robin Hood of retail, the Avenger against the forces of oppression, and the Punisher for rogues at the same time. Democracy is the force, and *Particl Marketplace* your lightsaber.

The time-economists among you will jump right to the Quickstart Guide.

INTRODUCTION 1

2 INTRODUCTION

CHAPTER

ONE

INTRODUCTION

Take your first few steps with understanding the *Particl Marketplace*. What is Particl Marketplace? What do you get, who is it for, and the answer to the why:

1.1 What You Gain

Particl Marketplace is a one-of-a-kind e-commerce platform that lets you buy and sell goods and services online with nobody in between. It's just you and the other person you're dealing with. There's no company operating, controlling, or benefiting from the marketplace.

Unlike Amazon, eBay, or any other in-betweens, it is built with core security and privacy principles that keep you and your data safe at all times.

The world has changed, so you change as well to brace up your liberty and future.

- Protect your finances and keep extra money for what matters in your life.
- Stand for liberty and stop being the exploited product.
- Squash the rogues and stop the scammers.
- Contribute to society when you buy and sell online.

Advanced and easy-to-use technology empowers you, your local economy, but not the corporate monopolies that prey on it. Feel like a hero fighting our generation's most powerful villains!

Note: Particl Marketplace relies on open-source technologies openly audited, inspected, and improved by a global community. It is based on distributed ledger and peer-to-peer technologies. It runs on a network of independent nodes hosted by volunteers scattered across the world. The entirely autonomous platform doesn't require any central party to operate or maintain, which means no company or organization is between buyers and sellers.

1.1.1 Protect Your Finances

In today's economy, your survival is mainly bound to the state of your finances. So protecting your finances is a natural desire. Unfortunately, if you use "free" internet services, they are not really free! No, instead, you pay with your invaluable personal information and data, on top of commissions and fees.

Particl Marketplace does not seek revenues from selling off your data or through fees. It doesn't need that data and income because there is no corporate interest behind it. Instead, the people working on Particl are supported entirely by community donations, without any strings attached or compromise for you. This brings down the total cost of doing online commerce.

"We help you to save more or make more money by cutting out the middleman."

1.1.2 Stand For Liberty

Big corporations collect data from you with every purchase and sale you make. They even do it the second you land on their website and start browsing. They use your data to analyze your behaviors as an online merchant or a consumer and increase their bottom line. Then, they sell your personal information or use it against you without your knowledge or consent. You've guessed it. You have become the product, and these corporations are your insidious thieves.

Corporations like e-commerce giants have become your credit score broker.

- · Based on their risk assessment, they rate your insurance policies.
- Your personal preferences will be the reason why you may not get a particular job.
- Or even worse, rating algorithms could block your bank accounts in the future!

The ever-sprawling giant e-commerce corporations always seek to expand their profits, market power, and control. They have created today's alarming digital security and privacy crisis under the guise of usability and convenience. And with all the information they possess, they've become more powerful than national governments! Believe it or not, protecting your data is protecting your finances and your quality of life.

"We help you to become the captain of your data and liberties."

1.1.3 Squash The Rogues

You Stop Privacy Invasions and Backdoors

No more stolen credit card information or passwords, compromised online accounts, or any online surveillance. When no data about you is created, it cannot be collected by anyone. And when no one collects it, it cannot be shared, sold, misused, hacked, or leaked anymore. That's true for sellers and buyers regardless of whether it relates to your products, locations, payments, shipping information, preferences, or any online activity. As a result, you can now defend your human right to privacy and shield yourself from the many technical and political uncertainties of today's world.

"We help you become invincible to privacy issues."

You Stop Restrictions, Politics, and Malice

Particl Marketplace has a 100% uptime that is impossible to be taken offline or manipulated. No merchant, buyer, or product can be banned, censored, or canceled by all-powerful tech overlords. Instead, it's the Particl community that is in charge of what content is allowed or not on the marketplace. Across national borders, you can now enjoy free trade and free-market conditions without the interference of governing bodies or unfair legislation. Manufacturers, vendors, and producers can freely decide how and with whom they do business.

"We help you become bullet-proof against unfair restrictions."

You Stop Fraud and Trickery

No more bricks in the package or bad quality counterfeit goods for you as a customer. No more chargebacks for vendors due to stolen identities. Fraudulent attempts get taken down with a free of charge and automated two-party escrow system.

"We help you to become immune to online fraud and scammers."

You Stop Spam and Unwanted Solicitations

Tailored ads are hammering on you even after making a purchase, and most of the time, even before you make it. You see them on the websites you visit, you encounter them throughout your emails, and directly on the apps you use. It even affects how search engines deliver results to you. Invasive ads follow you wherever you go, and, every day, they crawl deeper into your life.

"We help you to put an end to spam."

1.1.4 Contribute To Society

E-commerce and online marketplaces have made the world of shopping and selling a very different place. The price wars destroyed small merchants, only to benefit online platform operators and financial services providers. As a result, small businesses have had to give up, while only a handful of large corporations continuing to dominate the market. The ones who suffer the most are the low-to-middle-class people, the heart of every nation throughout the world.

Pledge to Small Merchants, Manufacturers, and Producers

Breaking the online monopolies gives merchants, manufacturers, and producers of goods and services the ability to build a livelihood that no longer depends on middlemen and large corporations' interests.

Pledge to Local Shops and Co-operatives

Local shops and co-operatives in your proximity get the ability to set up their own internet shops at virtually no cost, no maintenance requirement, and without any external interference or oversight.

Pledge to Yourself and your Communities

Some say that sustainability and responsibility are the cornerstones of a healthy economy. Don't wait for somebody to make the economy better. Be your own revolution and liberation. Share and discuss *Particl Marketplace* with your communities and help them improve their situation.

"It's time to give back to the small, to the oppressed, and the exploited. Now you can reduce global inequalities and competitive disadvantages."

1.1.5 Your Successes

By installing and using Particl Marketplace, you make a conscious decision that rewards you:

- You get lower product prices as a customer and higher margins as a vendor.
- You become the captain of your personal data and liberties.
- You are immune to online fraud.
- You are invincible to privacy issues.
- You are bullet-proof against restrictions.

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- You say goodbye to spam.
- You fight against global economic and social inequalities.

Admittedly, there is a price for all this. Currently, it is just a little bit of inconvenience. So, do you think it's worth it?

1.1.6 How it Works

Particl Marketplace relies on open-source technologies that are openly audited, inspected, and improved by the global community. Each and every single component of the marketplace is designed to keep you, your funds, and your personal information safe.

It is based on *distributed ledger* and *peer-to-peer* technologies, which you may know by hearing *Blockchain* and Bitcoin's synonyms. It runs on a distributed network (*Particl Network*) of *nodes* hosted by volunteers scattered across the world. It is an entirely autonomous platform that doesn't require any central party to operate, which means no company or organization is between buyers and sellers.

It gets even more interesting

Now you have a good understanding of what you get. In the next chapter, you'll learn about the target audiences and their needs. Can you find yourself there?

Perhaps you want to skip that part and install it right away? Just head over to the Installation Guides.

1.2 Target Audiences

Just using *Particl Marketplace* helps you prevent yourself from being treated as an exploited product. Without additional efforts, like casually, you contribute to the well-being of our society by directly supporting individuals and small businesses all across the world, not corporations.

Stand for fairness for consumers, equal opportunity for merchants and vendors, and freedom for all people. Let others not take control of you. Give it a try; you'll fall in love with it!

1.2.1 In Dire Need

Who needs a trustless, peer-to-peer trade and commerce environment?

Customers can never be 100% sure that they will receive the goods and services they've bought with the agreed specifications and quality. Likewise, suppliers sometimes encounter problems getting full payments for goods they deliver.

These examples from the industrial business world show how orders across national borders are still problematic for all parties involved if there isn't a pre-existing trust relationship. This contractual insecurity applies to almost any industry. Too often, both parties end up being left with a waste of time, money, and confidence.

Another example is the not-so-known problem of exit-scam schemes where money gets put into third-party escrow services with the deepest belief of a safe business transaction, but with an unfortunate and costly outcome.

"We help you to build, enable, and maintain safe and trustless business and commerce relationships."

Who needs privacy in e-commerce?

There are very good reasons for privacy in e-commerce. After all, it's nothing more than what we've been used to since the dawn of cash. It used to be that any commercial transaction made with cash was inherently private, a rapidly eroding concept ever since the internet came to be.

Today, privacy helps you protect yourself from data leaks and abuses, spam, and unwanted solicitations. Furthermore, it ensures that nobody can create a credit score, invasive customer profile, or insurance risk score without your knowledge or consent.

On top of that, big e-commerce platforms actively work on cannibalizing their users for their own benefits. They trace and invade their successful vendors' supply chains, put pressure on the suppliers, and copy trending or popular products. They then sell the copied products with their branding while suppressing or reducing the original vendor's exposure on their commerce platform. You may know one of the most famous online marketplaces in the world, which is entirely powered by this predatory behavior. But did you know that they repeat the same with their more than 100 in-house brands?

"We help you prevent others from turning your success into a weapon to be used against you."

Who is suffering from oppression and abusive restrictions in e-commerce?

Still to this day, this world has regions where political oppression and censorship are the status quo. Their citizens need a solution that delivers a way to do commerce without being persecuted. One can understand it as the equivalent of the human right of freedom of speech.

This problem is spreading globally and is not limited to countries deemed as authoritarian anymore. Tech giants censor individuals, businesses, or specific content that doesn't fit their agenda, leading to an ever-increasing online liberty crisis. You may have witnessed it in journalism, politics, literature, or philosophy when following the news.

"We help you to buy and sell what you want, when you want it, and wherever you want, despite any resistance."

Who needs an e-commerce solution where no banking account is required?

Believe it or not, according to the world bank, 1.7 billion adult people on planet earth are unbanked. But you can bet they are interested in doing business, especially in their local area. What's more, using financial services that don't rely on the banking system undoubtedly gives you the maximum level of financial independence and freedom.

Furthermore, traditional banking, as we know it, becomes more and more of a questionable concept. By rethinking this concept and executing the alternative, you can feel to be a part of a movement.

"We help you to help the unbanked world and rethink the concept of banking."

Who needs a backup plan for in-person deals?

It may sound surprising, but it's far from being far-fetched. Suppose, for example, that you buy a piece of jewelry directly from a person you don't know. This can be using Facebook Marketplace, Craigslist, or any similar local person-to-person solution. How do you make sure you don't get scammed? How do you make sure the quality, material, or stone is as promised and not some knock-off. There are many things that can go wrong with any type of transaction.

Particl Marketplace's unique two-party escrow system makes it possible to safely trade with anyone, online or in-person, even if you don't know them. It replaces the simple but unsafe in-person cash-for-item exchanges and the uncertainty of transacting with a stranger without any form of leverage against them to enforce honesty. Now you can force them to put their money where their mouth is.

"We help you enforce truthful and honest trades with your business partners regardless if that's online or in-person."

Who needs a free-of-charge e-commerce solution with no operating costs?

While other so-called "free" e-commerce marketplaces and solutions take advantage of you with a myriad of fees, and, even worse, with your data, habits, and personal information, you pay the price and end up with a substantial economic gap. For example, did you know that, depending on various factors, e-commerce platforms like Amazon can charge their sellers up to more than 40% per transaction? Don't think that's not reflected in retail prices!

On *Particl Marketplace*, the absence of commissions, sales fees, subscription models, and other operating costs encourages brands, vendors, suppliers, and even small retailers with their local businesses. It allows them to thrive within an entirely self-sufficient, circular, global, and community-led economy.

The only operating costs you will see on *Particl Marketplace* are tiny listing fees designed to fight off spam and unintentional usage. So now you've just found a new and beneficial sales channel for your business. Maybe it'll become your new favorite?

"We help your business and customers get the best deals possible."

1.2.2 Fair Economics

Driven by sensible economic motivations, customers and vendors always seek the best deals out there. Remove the corporate interest of a marketplace operator from the pricing model, and nearly anybody can see the impact it's going to have on retail prices by doing basic maths. Now, they can both finally get what they're looking for by participating in "just economics".

Retailers, merchants, and vendors, in general, looking for new target customer groups, sales channels, and revenue streams will find exactly what they're after. They'll be able to offer their products at ridiculously competitive prices. At the same time, they get rid of many problems usually associated with typical e-commerce solutions and payment processors. They now get near-instant and chargeback-proof payments, without any retention times, that cannot arbitrarily be held or frozen.

The absence of operating costs makes it attractive for cooperatives to set up their own and dedicated sales channel and gain exposure from a bigger public audience, or just towards a defined local VIP group of customers.

Ultimately, it's in your best interest to lead your existing customers to understand the benefits of better prices. It lets you enjoy the full range of advantages of economic advancement as an individual, a collective, or as a business.

"We help you reduce your e-commerce costs to the absolute minimum."

1.2.3 To Take a Stand

As you may have noticed, the world is changing. More and more people are actively starting to take a stand in various facets of society. Using *Particl Marketplace* is a very efficient but effortless way to do just that.

For example, the sustainability movement pays special attention to not wasting resources and protecting them. This ranges from agricultural products and their production to adequately treated and remunerated workforces.

There are also groups like the libertarians, a reasonably sized community, having their very own interests. They seek autonomy, political freedom, self-determination and constantly question the current economic and political systems. They care about our society, like most groups, but they have their own vision of it.

The list goes on, but that wouldn't do any group justice to put them all into one bucket. Ultimately, the common denominator relates to the concepts of abusive surveillance, censorship, monopolies, banking, and data gathering operations that prey on honest and caring people.

You know best you don't fit into a generalized pigeonhole. All these philosophies do exist and have a right to exist. It's a good idea to do the things you do carefully and purposefully, and perhaps you'll find yourself the desire to take a stand or give back to society.

"We help the caring society to take a stand and to express and achieve ideas of a better, fairer world."

1.2.4 Industries and Use-cases

- Trading goods or services in return for payments:
 - If instant settlement of payment is needed.
 - If counterparty risks need to be mitigated.
 - If the risk of receiving counterfeit goods is in play.
 - If an increased risk of non-payment (payment default) applies.
 - If the risk of payment delays is apparent.
 - If intermediaries (i.e., marketplace operators) take too much off the deal.
 - If intellectual property is at stake.
 - If security or privacy is at stake.
 - If the total cost of commerce is too high.
- When suppliers of goods have no cost-effective, protected, and fair access to international markets without using intermediaries.
- Exchange of industrial goods across national borders between two parties if there is no pre-existing or limited trust between them.
- When a distribution environment for small local stores or cooperatives and their local clientele is needed.
- Development of consumer and community markets for the new crypto-economy and reduce friction in payments.
- Creation of new business opportunities in international markets where local and artificial price protection on goods is in play.
- A corporate in-house tool for displaying and retrieving any type of resources and, optionally, their billing. Mini-ERP.
- When an individual, business, or organization gets hindered on typical online marketplaces and needs a censorship-proof environment to pursue its operations.
- To sell products and services that are not allowed on traditional marketplaces, such as second-hand precious metal bullions, for example.

These are just a few examples of who can instantly benefit from Particl Marketplace's decentralized e-commerce model.

Most of all, the people working on Particl would like to hear your success stories and ideas. Reach out to us! We would love to share them with the world and help you get more out of Particl Marketplace by finding more people to do business with.

That's a lot to grasp, isn't it? Keep in mind that *Particl Marketplace* is a global, all-inclusive e-commerce platform that is as diverse as humankind and is open to everybody. Focus on what serves your needs and on overcoming your

challenges. You will get rewarded and feel empowered like never before. Particl rapidly becomes your mantra and mindset.

Action

Do you know other curious minds? Please invite them to participate in the discussion on the status quo of commerce, monopolies, equal opportunities, and eventually, freedom to live a life worth living for us all and our children!

Keep on truckin'

You made a big leap forward. Now you understand a lot about who can benefit from *Particl Marketplace* the most and the diversity of its use-cases. In the next chapter, you will get a brief overview of the nuts and bolts that make Particl possible.

Perhaps you want to skip that part and install it right away? Just head over to the Installation Guides.

1.3 Particl Marketplace Brief Overview

The *Particl Marketplace* is your private and *decentralized* online marketplace to buy and sell anything online. Here, there is no marketplace company, e-commerce service provider, database, server, hosting service, payment processor, bank, and no other kind of third-party involved—just pure and confidential person-to-person transactions between you and another person.

This gives you many new benefits not possible before with traditional e-commerce, but there are just a few things you need to be aware of before you get started. It's very easy to use; let's go over them!

See also:

- Particl Academy Introduction What You Gain
- Particl Academy Introduction Target Audiences
- Particl Academy Explained Particl Marketplace

1.3.1 Don't Trust, Verify!

By choosing to use *Particl Marketplace*, you give yourself all the tools you need to confidently stay ahead of the technological curve with industry-leading *privacy technologies*.

And you don't need to trust anyone; the code is open-source, independently audited, and freely available online for everyone to inspect. See for yourself!

See also:

• Github - Overview Particl Repositories

1.3.2 General Usage and Concept

Particl Marketplace is a new type of online marketplace. It lets you enjoy an easy and cost-effective shopping experience that makes zero compromise on the core values of *decentralization*, *security*, *privacy*, and *disintermediation*.

That will make you stand out and stay on top!

Note: A web and a mobile version of *Particl Marketplace* are planned to be released later on and will play a key role in making the platform more accessible and convenient to use.

See also:

- · Particl Academy Guide User-Interface
- Particl Academy Explained Security and Privacy

1.3.3 Payment Processing

To benefit from near-free, near-instant currency transactions that cannot be held up, blocked, reversed, or delayed by anyone, you transact on *Particl Marketplace* using digital currencies commonly called *cryptocurrencies*.

You can use an ever-growing list of digital currencies to make payments on *Particl Marketplace*. However, the *final settlement* of any payment is always made in *PART*, Particl's own *cryptocurrency*.

Note: Payments with local, national currencies (i.e., USD, EUR) will be integrated later on. They will play a key role in making the platform even more accessible and convenient to use.

See also:

• Particl Academy - Explained PART Coin

1.3.4 Fraud Protection

Regardless if you're a vendor or a customer, you equally hate falling victim to a scammer. You want to protect yourself against fraud at all times, at no extra cost, and without any hassle.

One of *Particl Marketplace*'s unique selling propositions makes it a breeze for you to achieve that.

Any purchase you make on the marketplace is secured by a *two-party escrow system* that keeps you and your money safe without requiring any third-party.

See also:

• Particl Academy - Explained Two-Party Escrow

1.3.5 Phases of a Deal



Particl Marketplace not only saves you a lot of money, but it also gives you a ton of security and privacy benefits. That's why you're willing to do *three more steps* to complete a purchase in full!

These three additional steps are the only compromises made over traditional marketplaces. Now compare this tradeoff to all the benefits they get you. That's a pretty sweet deal!

Note: We are constantly improving the software and its user experience. Eventually, we also want to get rid of these extra steps.

See also:

- Particl Academy Explained A deal as a Step-by-Step Process
- Particl Academy Introduction Target Audiences

1.3.6 Community Markets

Want to have your own shop or even launch an entire market? Do you want it to be publicly available or kept secret between a few individuals?

On *Particl Marketplace*, you can deploy as many *shops and markets* as you wish. At all times, you stay in complete control of their associated data, their level of privacy, and accessibility. And to put the icing on the cake, this all comes at no extra cost for you.

You can use *community markets* for almost anything. You can launch your own brand stores, markets for your online community, NFT markets, art galleries (bidding auctions), VIP or private stores, OTC desks, pop-up stores, and pretty much anything you can imagine. The possibilities are endless!

See also:

• Particl Academy - Guide Markets & Storefronts

1.3.7 Content Moderation

The "wisdom of the crowd" is your secret power when it comes to moderating Particl Marketplace.

Since you, everybody, and nobody owns the *Particl Marketplace*, every participant has the equal ability to flag and take off undesirable content.

See something you think shouldn't be on the marketplace? Flag it! When enough people do the same, it will be taken off the market. Flagging a listing will also take it off your local version of the marketplace to prevent you from seeing it again.

See also:

• Particl Academy - Explained Marketplace Moderation

1.3.8 Work in Progress

Particl Project is an ever-ongoing work in progress. Every day, it gets better, easier to use, and more accessible. Exciting new projects and features constantly emerge to help the *Particl ecosystem* thrive.

Be a part of it – as a customer, vendor, promoter, developer, manager, or any other void you can fill with your passion.

Action

Visit the blog Particl News, follow on Twitter, Reddit, or register to the newsletter to stay in the loop about what's coming next.

Almost there

Phew! You've made it this far! By now, you have a pretty good understanding of the *Particl Marketplace*. In the next section, you'll have a deeper look into all of its components.

But perhaps you want to skip that part and install it right away? Then head over to the Installation Guides.

1.4 All Functions

Particl is a *decentralized* marketplace and is in its Beta phase of development. While there are still a lot of features under development, it currently provides you with most of the basic tools you need to buy and sell online without sacrificing your personal information and without paying fees.

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1.4.1 Wallet

The "wallet" section of the *Particl Desktop* client refers to the section where you manage your funds. It also contains a few other features not related to Particl's marketplace.

Wallet Management

Particl Desktop lets you safely manage an infinite number of wallets within the same environment.

- · Create and import an infinite number of wallets
- Instantly switch between different wallets
- · All wallets are independently encrypted for maximum security

Particl Cryptocurrency (PART)

The PART coin is Particl's native *cryptocurrency*. It is a modern, secure, private, and flexible *cryptocurrency* built on the most recent version of Bitcoin, to which many improvements and extra functionalities have been added.

- · Send and receive funds to anyone without any middleman.
- Buy and sell goods and services on Particl Marketplace.
- Near-instant settlements, transactions only take ~2 minutes to settle.
- Near-zero transaction fee, usually a cent or less.
- No financial borders, there are no international (fx) fees or geographical restrictions.
- Adjustable level of privacy to fit your needs.
- Built on the Bitcoin codebase and always maintained up to its most recent version.
- Proof-of-Stake consensus protocol, earn dividend-like staking rewards.
- Coins are counted as voting power in the marketplace's moderation system.
- Secure your funds with multi-signature addresses which require more than one party to authorize transactions.
- Available on desktop and mobile wallets.

In-depth details can be found at Currency (PART) Explained.

Particl Proof-of-Stake (Staking)

Staking is the act of keeping a *node* online to support and secure Particl's distributed network. When you do so, you start receiving regular staking rewards paid by the network in exchange for your contribution.

- Earn dividend-like staking rewards in exchange for keeping Particl nodes online.
- Staking interest on Particl varies between 2% and 5% depending on the percentage of the supply being put up for staking.
- The network gets more secure and resilient as more people stake.
- "Cold staking" is a hyper-secure staking option that lets you delegate your staking power to an online *node* that contains no coin.
- · Particl provides many different cold staking variants, each one being as secure as the other ones.
 - Cold staking: Stake your coins stored even when stored offline, such as on cold wallets, hardware devices, or even paper wallets.
 - Staking pool: Combine your staking power with other stakers to earn more frequent payments.
 - Hardware staking: Stake your coins stored on hardware devices such as the Ledger Nano and the Trezor.
 - Mobile staking: Stake your coins stored on your phone without draining your battery.
 - Multi-signature staking: Stake your coins stored on special addresses that require multiple parties to authorize transactions.

In-depth details can be found at *Staking Explained*.

Address Book (Contacts)

Because funds need to be sent to cryptographic addresses, it can be hard to remember who owns which address. *Particl Desktop*'s address book page is there specifically to help you make sense of these addresses by saving them to contacts.

- Save both public and private PART addresses and enter their contact information.
- Display a contact's address and all of its details in a block explorer.
- Sign and verify messages using PART addresses.
- When sending funds to one of your contacts, you can quickly pick their address from the address book.

1.4.2 Marketplace

Particl Marketplace is accessible right from the Particl Desktop application. It is deployed on a distributed network that lets you connect directly, without the help of any intermediary, with buyers and sellers from all around the world.

In-depth details can be found in the Particl Marketplace Explained guide.

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Open Market

Particl's *Open Market* allows you to buy and sell products and services online without requiring any middleman to facilitate the transaction. The *Open Market* is the market you see when you first launch the application. It is enabled and available by default, unlike user-generated markets and storefronts.

- Buy and sell anything at no cost.
- No commission, sales, withdrawal, or subscription fee.
- Sell products on as many Particl markets as desired.
- No pre-defined bans on products and services.
- Every seller has equal exposure, no pay-to-win schemes.
- · Accessible from anywhere in the world.
- Just like the Internet, the marketplace cannot be shut down or be put offline.
- Marketplace transactions do not generate any traceable data and protect your personal information.
- Any listing can be saved in your favorite list.

Markets and Storefronts

Additionally to the *Open Market*, you can also create an infinite number of markets and storefronts. Each community market is hosted on the Particl network, along with the *Open Market*, and can easily be connected to using *Particl Desktop*.

- Markets and storefronts offer the same functionalities as the *Open Market*, but with a few extras.
- Markets and storefronts are two different types of markets but are both usually referred to as "community markets".
 - Markets: A market type where anyone with access to it can buy and sell on.
 - Storefronts: A market type where anyone can buy stuff, but only its creator and the people he delegates can sell on.
- Community markets can be joined by anyone that knows their Market ID or by browsing the Market Browser.
- Markets do not automatically show up in the Market Browser right after being created. They have to be manually promoted to it by its creator if they wish to gain additional exposure.

The user guide can be found at *Markets & Storefronts*.

Market Browser

The Market Browser is where you can explore various different community markets and join them. It is a list of all promoted markets and storefronts.

- · See all the community markets that have been promoted to the Market Browser by their creators.
- Flag undesirable markets and vote on markets flagged by other people.

Inventory Management

Particl Marketplace lets you manage your inventory by creating a listing template for each item you want to sell. Additionally, you can manage your inventory's quantity and variants (i.e., colors, sizes, etc.). Quantity and variant management is currently under development and will be added at a later update.

- Listing templates are reused every time you want to republish an item on the marketplace.
- When a listing expires, the listing template saves its comments, feedback, and Q&A.
- When a listing expires, it keeps its moderation score.
- Listing templates can push listings on multiple community markets and storefronts.

Two-Party Escrow System

Particl's two-party escrow system protects users against scammers and ensures that marketplace transactions can be completed in a safe way. It requires both parties to temporarily lock a security deposit that can only be refunded, at no fee, once both parties agree that a transaction was completed satisfactorily. This forces transacting parties to remain honest with each other and collaborate in case an issue arises.

- Doesn't involve any middleman such as a third-party temporarily holding funds on behalf of transacting parties.
- Free to use; no fee is charged for the service.
- The escrow system is entirely autonomous and uses smart-contracts.
- All transactions made with the escrow system are untraceable by default, and no personal information can leak out.
- Escrow transactions are secured by blockchain technology and cannot be interfered or tampered with.
- Two-party escrow contracts are mandatory for all marketplace transactions.
- You can check the status and progress of any escrow transaction at any time on *Particl Desktop*.

In-depth details can be found at Two-Party Escrow Explained.

Marketplace Moderation

To moderate the content of the marketplace, Particl relies on a distributed moderation system that gives moderation powers to every user. Voting power is calculated on a one-coin-equals-one-vote basis.

- No central authority or group of users with special permissions involved.
- Your voting power is determined by the number of coins you own in your *Public* balance.
- One coin equals one vote.
- Both listings and community markets can be flagged and taken off Particl if deemed undesirable.
- Moderation model based on the concept of direct democracy.
- The system is based on blockchain technology and cannot be cheated.

In-depth details can be found at Marketplace Moderation.

1.4. All Functions 17

Questions and Answers

Particl's "Comments and Reviews" feature allows buyers and sellers to interact with each other directly and publicly from a listing's page. Buyers can ask questions, leave feedback, and make comments on listings, while the seller can directly and publicly respond to each message.

The feature is additionally integrated into any transaction allowing two users to publicly communicate in case there's an issue with an order.

- · Ask a question, leave feedback, make comments, or ask for additional details on any listing page.
- Answer questions from shoppers directly inside a listing's page.
- See all the messages left by other people.
- Each new message creates a thread where the seller, as well as anyone else, can participate in.

1.4.3 Swap

The in-app swap module of *Particl Desktop* is where you'll find everything you need to swap other *cryptocurrencies* for PART. It is also where you'll find other payment options such as credit card payments if any is available at the time.

Swapping Assets

- Swap any available *cryptocurrency* (i.e., BTC) into PART to top up your Particl wallet.
- Connects to external exchanges using API.
- "Atomic swaps" give you the option to swap available *cryptocurrencies* for PART without requiring any middleman to facilitate the transaction (coming soon).

Multi-Currency Support (Marketplace)

- Pay for products and services using any of the available *cryptocurrencies* (i.e., BTC).
- The marketplace automatically converts non-PART payments in PART before funding any two-party escrow contract.

Attention: Particl's in-app swap engine is temporarily unavailable. We are working on getting it back up as soon as possible!

1.4.4 Messaging

Tip: Particl developers are currently building an in-app messaging and chat system.

See also:

Other sources for useful or more in-depth information:

- Particl Website Particl's Roadmap
- Particl Website Particl's Achievements
- What You Gain
- Target Audiences
- Brief Overview
- All Functions Overview

1.4. All Functions

INSTALLATION & USAGE

All begins with the installation of the *Particl Desktop* software. Follow these best practices for the installation, set up your first wallet, and understand the user interface:

2.1 Quickstart

Particl Marketplace provides you with the most secure, private, and censorship-resistant e-commerce experience on the web.

Understanding the basics of Particl Marketplace

- Particl Academy Intro What You Gain
- Particl Academy Intro Target Audiences
- Particl Academy Intro Particl Marketplace Brief Overview

The following guides will take you through each step, from A to Z, so that you can begin to buy or sell anything online without restriction.

- 1. Download and install the Particl Desktop client
 - Particl Desktop & Marketplace Installation
- 2. Have PART coins in order to buy or sell items on Particl Marketplace
 - Obtaining PART
- 3. Save time by preparing your funds in *Public* and *Anon* balances
 - Funds, Coins, and Balances
- 4. Start buying and selling
 - Buy Process
 - Sell Process
 - Markets and Storefronts

Get help

Need help? The Particl community will take great care of you. At these locations, you'll find answers and support.

- Frequently asked Questions (FAQ)
- Common Issues
- Get Support
- Glossary

2.2 Installation Guides

In this section, you will learn how to install Particl Marketplace, additional software, and how to backup your data.

Table of Contents

- Particl Marketplace
 - Download
 - Installation process
 - Checksum verification
 - Starting Particl Desktop
- Backup Account and Data
 - File locations
- Install Tor (Network Privacy)
 - Using the Tor browser
 - Using the Tor daemon
 - Enable Tor on Particl Desktop
 - Important Considerations

2.2.1 Particl Marketplace

To get started with *Particl Marketplace*, you need to download and install the *Particl Desktop* client software. Its installation is very easy and won't take you more than a few minutes!

Download

Choose the correct version to download.

Windows

Mac

Linux

Windows file version

Mostly you will be fine by downloading the particl-desktop-X.X.X-win.exe installer file. It supports any version of Windows.

Download sources

- Particl Homepage: https://particl.io/downloads/
- Particl Github: https://github.com/particl/particl-desktop/releases/latest

Attention: NEVER download Particl clients from 3rd party websites! Bad actors are constantly trying to distribute malware-infected versions of popular *cryptocurrency* wallets to steal your funds! So always download from official sources only.

MacOS file version

Mostly you will be fine by downloading the particl-desktop-X.X.X-mac.dmg installer image. It supports any version of MacOS, including 10.15 (Catalina) or greater.

Download sources

- Particl Homepage: https://particl.io/downloads/
- Particl Github: https://github.com/particl/particl-desktop/releases/latest

Attention: NEVER download Particl clients from 3rd party websites! Bad actors are constantly trying to distribute malware-infected versions of popular *cryptocurrency* wallets to steal your funds! So always download from official sources only.

Linux file version

Depending on your Linux distribution, you can choose between different packages, including Debian-based .deb, .rpm packages, a distribution independent .AppImage version.

Once you know which Linux distribution you are running, it's straightforward to find out which package manager you have and which package will suit you. The distribution independent .AppImage file will make your installation experience a blast.

Download sources

- Particl Homepage: https://particl.io/downloads/
- Particl Github: https://github.com/particl/particl-desktop/releases/latest

Attention: NEVER download Particl clients from 3rd party websites! Bad actors are constantly trying to distribute malware-infected versions of popular *cryptocurrency* wallets to steal your funds! So always download from official sources only.

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Installation process

Windows

Mac

Linux

Windows installation

- 1. Verify the checksum of the file.
- 2. Open the downloaded particl-desktop-X.X.X-win.exe installer file.
- 3. Follow the installation instructions
- 4. An executable file will be added to your desktop and into the application launcher menu. Use this to start *Particl Desktop*.
- 5. Assign allow-rules to your computer's firewall and antivirus software. On a standard Windows installation, *Microsoft Defender* pops up.

Ignoring step 5 might cause a degraded blockchain sync experience and everything takes longer than expected or might cause communications problems. If you are unsure how to apply rules to your firewall and anti-virus software, please review the vendor's documentation of your installed programs.

MacOS installation

- 1. Verify the checksum of the file.
- 2. Open the downloaded *particl-desktop-X.X.X-mac.dmg* installer image by pressing CONTROL + MOUSE-RIGHT and click *Open* from the appearing shortcut menu. *Do not just double-click the icon*.
- 3. Drag and drop the *Particl Desktop.app* file into the *Applications* folder.
- 4. Open the Applications folder and locate the Particl Desktop.app file.
- 5. Press CONTROL + MOUSE-RIGHT on the *Particl Desktop.app* file and click *Open*.
- 6. On the first launch, your computer's firewall must get a rule to allow Particl Desktop to communicate with the blockchain.

From now on you will be able to start *Particl Desktop* from the Launchpad or Spotlight (e.g., COMMAND + SPACE and type "Particl" > hit ENTER) search.

Linux installation

- 1. Verify the checksum of the file.
- 2. Navigate to where you've downloaded your installer file in the terminal.
- 3. Depending on your package manager, this command will vary.

Debian-based installation

```
sudo apt install particl-desktop-x.x.x-linux.deb
```

RPM-based installation

```
sudo dnf -i particl-desktop-x.x.x-linux.rpm
```

AppImage

```
chmod a+x particl-desktop-x.x.x-linux.AppImage
./particl-desktop-x.x.x-linux.AppImage
```

4. On the first launch, your computer's firewall must get a rule to allow Particl Desktop to communicate with the blockchain.

An application launcher will be added your applications menu when using .deb or .rpm installations. Click it to start the *Particl Desktop* client.

Tip: If you want to launch it from the terminal, quotation marks may be required because there is a space in the name (Particl Desktop).

```
user@linux:~> which "Particl Desktop"
/usr/bin/Particl Desktop

user@linux:~> "/usr/bin/Particl Desktop"
(Particl Desktop:16887)
```

Congratulations! You have installed *Particl Marketplace*.

Hint: Loading and Syncing Times

Because the *Particl Marketplace*'s content is hosted on distributed Networks for payments and exchange, the marketplace may take a few minutes to sync. It may take even a few more minutes to load all marketplace listings fully. This is to be normally expected and will get much faster as the Particl team improves the marketplace.

Checksum verification

Obtain the checksum code from the official download sources for the downloaded file. Each file has its own checksum.

Being your own bank with blockchain-related products shifts some responsibilities to you. One of them is to take security seriously. Please make sure that the file you've downloaded isn't compromised in any way by verifying its checksum.

Windows

Mac

Linux

Checksum verification command with terminal

- 1. Open Windows Explorer
- 2. Press SHIFT + MOUSE-RIGHT on the Download folder and choose *Open command window here* or *Open power shell here*.
- 3. Type the following command into the terminal while changing filename for the real and complete filename of the downloaded file and hit ENTER .

```
CertUtil -hashfile filename SHA256
```

Checksum verification command with terminal

Tip: Prerequisite: Head into *System Preferences* and select *Keyboard > Shortcuts > Services*. Find *New Terminal at Folder* in the settings and enable the checkbox.

1. Open Finder

- 2. Press MOUSE-RIGHT on the Download folder of the file and you're shown the *services* > *open terminal* command to open the terminal at this location.
- 3. Type the following command into the terminal while changing filename for the real filename of the downloaded file.

```
shasum -a 256 filename
```

Checksum verification command with terminal

1. Open a terminal in the Download-folder of the file and type the following command by changing filename for the real filename of the downloaded file.

```
sha256sum filename
```

Once that is done, compare the checksum output you've received in the step above with the checksum stated in the official download sources. The screenshot below shows you an example of this checksum highlighted from the GitHub release notes *Verification* section.

VERIFICATION

LINUX: 7b2cc1537e85d68e525563fa3120ea859d3d41e5b7b0c740888fadd35388c02a particl-desktop-2.3.2-lin a72b838f9c33ea8607bac089e665ecd4c3816996ff4eee483fef18e810acb2cd particl-desktop-2.3.2-lin ec0aad516b83198f79468e72ed5662fa67a477efcd101d1f8294a0ea8ce3f20a particl-desktop-2.3.2-lin WINDOWS: d60937833a9cd747a1924cb2164d096d5ce2961f62bf3b645b62b4ac72dad063 particl-desktop-2.3.2-win 78e50fd85e7eca1285822df066aca20ba5e26d5415883ce7b8bcf1f2223832f6 particl-desktop-2.3.2-win dd6312e230417c1fdb032528b4a0c9ee8e9dc75e6d6539dfa8fbeaceec7eb6f2 particl-desktop-2.3.2-win 0S X: Any version, including 10.15 (Catalina) or greater 02a4c267bf832628c25cd902142af2ccb2e45eccde32c0c80c7f8b133e562e2e particl-desktop-2.3.2-mac Can only be used on 10.14 (Mojave) or earlier 531050b0ab691ae21dc9df8d477570c59696aa58fec987c90198b8c4f96c2bc5 particl-desktop-2.3.2-mac

Fig. 1: Particl Marketplace installation checksum highlighted image

Troubleshooting checksum mismatch

If the output does not match, try to download the file again. Verify that you did not unzip or rename the file. In some cases, it might be possible that antivirus software may alter files, be sure to have a solution on your own in that case.

Attention: If all attempts fail to have a matching number, do not install *Particl Desktop* unless you know what you are doing and try to reach out to *Particl Support* for assistance.

Starting Particl Desktop

You have two options: startup with the launcher icon (recommended) or a terminal command.

Startup with Launcher

Windows

Mac

Linux

Launching Particl Desktop with Launcher

- 1. Open your Start Menu by pressing WIN Key
- 2. Start typing Particl
- 3. Click on the *Particl Desktop* launcher icon.

Launching Particl Desktop with Launcher

- 1. Open *Spotlight* (e.g., COMMAND + SPACE)
- 2. Type Particl
- 3. Click on the *Particl Desktop* launcher icon.

Launching Particl Desktop with Launcher

- 1. Open your applications menu
- 2. Click on Particl Desktop launcher icon

Startup from Terminal

Sometimes it is handy to start *Particl Marketplace* from the terminal, aka command line. It gives you plenty of output and information about what is happening in the background.

Windows

Mac

Linux

Launching Particl Desktop from terminal

- 1. Open Windows Explorer
- 2. Press SHIFT + MOUSE-RIGHT on the Installation folder (e.g., C:/Program Files/Particl) and choose Open command window here or Open power shell here.
- 3. Type the following command into the terminal and hit ${\tt ENTER}$.

```
"Particl Desktop.exe"
```

Launching Particl Desktop from terminal

- 1. Open *Terminal* (e.g., COMMAND + SPACE and type "terminal" > hit ENTER)
- 2. Type in this command:

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```
/Applications/Particl\ Desktop.app/Contents/MacOS/Particl\ Desktop
```

Launching Particl Desktop from terminal

1. Open a terminal in the folder where you've installed *Particl Desktop* and type the following command.

```
./Particl\ Desktop
```

2.2.2 Backup Account and Data

File locations

After a successful installation of *Particl Desktop*, the main application has been installed into the standard location of your operating system. Once the *Particl Desktop* is run the first time, it will create user-specific data within your user account. These include settings, log files, wallets, and the blockchain data itself. From time to time, it is a reasonable measure to backup these data to an encrypted external resource.

Windows

Mac

Linux

```
## Windows paths

"%UserProfile%\AppData\Roaming\Particl"

"%userprofile%\AppData\Roaming\particl-bot"

"%userprofile%\AppData\Roaming\particl-market"

"%userprofile%\AppData\Roaming\Particl Desktop"
```

```
## MacOS paths

"~/Library/Application Support/Particl"
"~/Library/Application Support/particl-market"
"~/Library/Application Support/Particl Desktop"
```

```
## Linux paths

"~/.particl"
"~/.particl-bot"
"~/.particl-market"
"~/.config/particl-desktop"

## Launcher path

"/opt/Particl Desktop/Particl Desktop"
```

See also:

Other sources for useful or more in-depth information:

• Particl Wiki - Backup & Restore wallet

2.2.3 Install Tor (Network Privacy)

Attention: The *only* privacy setting not turned on by default is the ability to keep your IP address anonymous when using Particl. This is done by routing your client's connection through Tor, a networking protocol designed to anonymize your IP address.

Danger: Always make sure your *Tor* is up-to-date with the latest version. This is a critical requirement that, if not followed, can heavily compromise your online privacy and potentially let other people spy on your online activity.

Tor isn't enabled by default on Particl because it requires extra care from you to be truly safe. It's a network that runs independently from Particl on your computer and needs you to keep critical security considerations in mind.

To make sure you don't download a compromised version of Tor, always download it from their official website. What good would updating *Tor* do to you if it lets the door wide open to hackers? To avoid any man-in-the-middle-attack, always verify the cryptographic signature of the *Tor* files you download, even if it's from Tor's official website. To do so, follow this tutorial on how to verify Tor signatures written by the *Tor* team itself.

The *Tor* network can be installed using three different methods. Always make sure that, regardless of the installation method you choose, *Tor* is running the latest version before using it.

Using the Tor browser

- 1. Download the Tor Browser and install it on your computer.
- 2. Launch the *Tor* browser.
- 3. Connect to the *Tor* network by clicking on *Connect* or configure your connection parameters by clicking on *Configure*.
- 4. Once connected, leave the *Tor* Browser running in the background of your computer.

Using the Tor daemon

Windows

Mac

Linux

- 1. Download the Tor Browser and install it on your computer.
- 2. Open *Windows Explorer* and navigate to the *Tor* installation directory (e.g., C:/Program Files/Tor Browser).
- 3. Go into the Tor directory, hold down SHIFT and click with MOUSE-RIGHT.
- 4. Open *Open command window here* from the menu.
- 5. In the terminal that pops up, type:

```
tor.exe -service install
```

6. Verify that *Tor* service is running, type:

```
sc query "Tor" | find "RUNNING"
```

Tip: If not already in place install homebrew. Put this code into the terminal.

```
xcode-select --install
ruby -e "$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install/master/install)"
echo "export PATH=/usr/local/bin:/usr/local/sbin:$PATH" >> ~/.profile
```

1. Install the *Tor* daemon with homebrew by typing:

```
brew install tor
```

2. Enable *Tor* as a Brew service by typing:

```
brew services start tor
```

- 1. Open a Terminal
- 2. Install the *Tor* daemon by typing:

```
sudo apt install tor
```

3. Make sure *Tor* launches on startup by typing:

```
sudo systemctl enable tor
```

Enable Tor on Particl Desktop

Enable *Tor* support for *Particl Desktop* with the proper proxy instructions. Either you add a special argument to the command you use to launch *Particl Desktop*, or you make it a permanent setting.

Enable by default from GUI

- 1. Open Particl Desktop and click on Particl Desktop Settings in the bottom left corner
- 2. Go to *Core network connection* and put into the *Connect via Proxy* field 127.0.0.1:9150 if you are using the Tor Browser OR 127.0.0.1:9050 if you are using the Tor daemon
- 3. Hit Save changes and restart Particl Desktop

Enable by default from commandline

1. Open the configuration file:

```
nano ~/.particl/particl.conf
```

2. If you are using Tor Browser add this line to the configuration file:

```
proxy=127.0.0.1:9150
```

If you are using Tor daemon add this line to the configuration file:

```
proxy=127.0.0.1:9050
```

Note: From now on, *Particl Desktop* will try to connect with the settings you made. That means if *Tor* is not running on your machine, then *Particl Desktop* has no access to the internet.

Enable with terminal startup

Windows

Mac

Linux

Launching Particl With Tor

- 1. Open *Windows Explorer* and press SHIFT + MOUSE-RIGHT on the Installation folder (e.g., C:/Program Files/Particl) and choose *Open command window here* or *Open power shell here*.
- 2. If you are using Tor Browser, type following commands into the terminal and hit ENTER.

```
"Particl Desktop.exe" -proxy=127.0.0.1:9150
```

If you are using Tor daemon, type following commands into the terminal and hit ENTER.

```
"Particl Desktop.exe" -proxy=127.0.0.1:9050
```

Launching Particl With Tor

- 1. Open Terminal (e.g., COMMAND + SPACE and type "terminal" > hit ENTER)
- 2. Type in this command if you are using Tor Browser:

```
/Applications/Particl\ Desktop.app/Contents/MacOS/Particl\ Desktop -

→proxy=127.0.0.1:9150
```

Type in this command if you are using Tor daemon:

```
/Applications/Particl\ Desktop.app/Contents/MacOS/Particl\ Desktop -

→proxy=127.0.0.1:9050
```

Launching Particl With Tor

1. Open a terminal in the folder where you've installed *Particl Desktop* and type the following command if you are using Tor Browser.

```
./Particl\ Desktop -proxy=127.0.0.1:9150
```

type the following command if you are using Tor daemon.

```
./Particl\ Desktop -proxy=127.0.0.1:9050
```

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Using Tor as a Hidden Service

On Linux, you can also run *Tor* as a hidden service and connect your *Particl Desktop* to it. This allows other people to use your *node* as an entry or exit point, making the *Tor* network more *decentralized* and private.

1. Open a *Terminal* and install the *Tor* network by typing:

```
sudo apt-get install tor
```

2. Define that you want to use *Tor* as a hidden service by modifying the *Tor* config file. To do so, type:

```
sudo nano /etc/tor/torrc
```

In the config file, add these two lines:

```
HiddenServiceDir /var/lib/tor/particl-service/
HiddenServicePort 51738 127.0.0.1:51738
```

Save and exit the nano file editor by pressing CTRL+c, then type y followed by ENTER to save the changes.

3. Restart *Tor* by typing into the terminal

```
sudo service tor restart
```

4. Find your hidden service's IP address (.onion) by typing (For the purpose of this tutorial, we'll refer to this address as [yourexternalip].onion):

```
sudo cat /var/lib/tor/particl-service/hostname
```

5. Modify your Particl config file to route its connection through your hidden service by typing:

```
touch ~/.particl/particl.conf && nano ~/.particl/particl.conf
```

Then add these lines to the file and don't forget to set yourexternalip.onion

```
externalip=[yourexternalip].onion
onion=127.0.0.1:9050
addnode=7vusex6gv5eerqi2.onion
addnode=quf7tm4gk3xn3aee.onion
addnode=46fvsrrq75dx5vq4.onion
addnode=ciikdjtoop7l6p6h.onion
addnode=frlfghlielxq2ncy.onion
addnode=partusq5qad6jd2c.onion
addnode=x6fxdwpq2krxzmr3.onion
addnode=amu2ck7lyw26fiqs.onion
addnode=kfyopkn3shigcneh.onion
onlynet=tor
listen=1
bind=127.0.0.1:51738
maxconnections=30
```

Save and exit the nano file editor by pressing CTRL + c, then type y followed by ENTER to save the changes.

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Important Considerations

Keep Tor up-to-date

Tor needs to always be updated to the latest version. This is a critical requirement that, if not followed, can heavily compromise your online privacy. *Tor* updates contain very important security fixes to keep your identity confidential.

As the network itself is widely targeted by hackers due to the privacy it provides, unpatched versions of *Tor* are considered unsafe to use. If exploited, a compromised version of *Tor* may leak your true identity and even let others spy on your online activity.

Windows

Mac

Linux

Updating Tor

- 1. Open the *Tor* Browser
- 2. Check if the browser prompts you to update the a newer version.

Updating Tor

- 1. Open Terminal (e.g., COMMAND + SPACE and type "terminal" > hit ENTER)
- 2. Type this line of code and hit ENTER

```
brew update && brew upgrade
```

Updating Tor

1. Open a *Terminal* and run the upgrade procedure depending on your package manager.

Example

```
sudo apt update && sudo apt-upgrade
```

Depending on your linux flavor this command may vary. There are multiple package-managers out there, but their usage is quite the same.

- Quickstart Guide
- Particl Desktop & Marketplace Installation

2.2. Installation Guides

THREE

USER GUIDES

Step-by-step user guides about the most vital processes of *Particl Marketplace*. Find everything summarized without having questions left open:

3.1 Funds, Coins, and Balances

In this section, you will learn how to manage your funds using *Particl Desktop* in preparation for buying and selling goods and services on *Particl Marketplace*.

Table of Contents

- · Needed Funds
- · Receive Coins
- Convert Balances

Note: With Particl's native currency (PART), there are three different types of transactions:

- 1. Public transactions
- 2. Blind transactions
- 3. Anon transactions

Each of them serves a different function within the platform and carries its own level of transactional privacy.

3.1.1 Needed Funds

PART funds needed for selling

To sell products and services on *Particl Marketplace*, you typically need to have coins in both your *Public* balance and in your *Anon* balance. If you enable the *Use spendable (Anon) balance for publishing fees* option in your market settings, then you only need to have funds in your *Anon* balance. Keep in mind publishing listings will be more expensive if you choose that option.

PART funds needed for buying

To buy products and services on *Particl Marketplace*, you only need coins in your *Anon* balance.

See also:

- Particl Academy Obtaining PART coins
- Particl Academy PART Cryptocurrency Explained
- Particl Academy Staking Explained

3.1.2 Receive Coins

There are multiple ways you can fund your balances with PART coins.

From another PART address

Receive PART coins coming from any wallet holding PART funds. This can be a personal wallet, a public exchange service provider, or a hardware wallet.

- 1. Open Wallet -> Receive.
- 2. Receive a public transaction by choosing *Public* from the tabs menu at the top of the page, or select the *Private* tab instead if you want to receive a private transaction (either *Blind* or *Anon*).
- 3. Share your address with the party to receive the funds.

Tip:

- 1. Both the sender and receiver must agree on the transaction type (exchanges, for example, only support *Public* transactions).
- 2. Create a new *Receive* address for every transaction. (Optional, but recommended for better privacy).
- 3. Adding a label to an address is helpful to keep track of your transactions better.
- 4. When posting the address from the clipboard to another party, always verify and double-check the pasted address with the original. Make sure they are identical. Remember: **You are your own bank**.

From the in-app swap-exchange module

The in-app swap-exchange module allows you to obtain PART funds without the need to visit an external exchange or directly deal with another party.

See also:

• Particl Academy - Using Particl's In-App Swap Engine

3.1.3 Convert Balances

Switching your coins from one type of balance to another is required to make different types of transactions. Refer to the *PART Coin Explained* in-depth guide for more details on transaction types and balances.

- 1. Open Wallet -> Send / Convert -> Convert Public & Private.
- 2. In the *Pay From* section, select the source of funds you would like to convert. In the *Convert To* section, select the destination of funds you would like to receive.
- 3. Type in the number of coins you want to send to your other balance and click on the *Make Payment* button.
- 4. Review the transaction details and click on the Confirm & Send button to start the process.

Tip:

- 1. Wait for twelve (12) confirmations (approximately 24 minutes) before the funds in the anon balance can be used without restriction.
- 2. You can track the status of transactions in the *Overview* module under *Recent Transactions*.

3.2 Obtaining PART

To use *Particl Marketplace* and enjoy its privacy features, you need the PART coin. It can be purchased or exchanged using cryptocurrency exchanges and various online services.

3.2.1 Cryptocurrency Exchanges

While cryptocurrency exchanges are mostly regulated and privately held companies intent on making a profit, they are the most common way to obtain coins. In some cases, owning Bitcoin is a prerequisite to purchasing PART.

- Bittrex (recommended)
- Probit (recommended)
- 1. Register on the cryptocurrency exchange of choice
- 2. (Optional) If you don't already own Bitcoin, trade some using other cryptocurrencies
- 3. Trade Bitcoin (BTC) for Particl (PART)
- 4. Withdraw PART to your local wallet's *Public* address within the *Particl Desktop* client. Refer to the *Receive Coins* user guide for more details

See also:

- Particl Website Full list of PART exchanges
- Particl Academy Managing Funds Receive Coins

3.2.2 Non-Custodial Exchanges

Non-custodial exchanges or swap exchanges are online services that let you directly exchange one cryptocurrency for another without intermediary steps and double fees.

- WizardSwap (recommended)
- 1. Open the swap exchange website.
- 2. Choose the source cryptocurrency to swap from.
- 3. Choose PART as the target cryptocurrency.
- 4. Review the quote offered by the exchange.
- 5. Send your coins to the address provided and wait for the transaction to be completed. This can take several minutes, depending on the exchange and the currency you trade for.
- 6. Receive PART to your local wallet's *Public* address within the *Particl Desktop* client. Refer to the *Receive Coins* user guide for more details.

3.2.3 In-App Swap Engine

The PART coin can also be obtained directly from within the *Particl Desktop* client. The in-app swap engine lets you get PART without registering on any third-party exchange and without leaving the *Particl Desktop* client. It is the most user-friendly method.

Attention: Particl's in-app swap engine is temporarily unavailable. We are working on getting it back up as soon as possible!

- 1. Open Particl Desktop.
- 2. Open the Swap module from within the apps menu at the very left and then click on Start New Exchange.
- 3. Set the number of PART coins you want to obtain and the currency you want to swap for it. Then click on the *Next* button.
- 4. Review the quote offered by the exchange. Click on the *Next* button to confirm.
- 5. Send your coins to the address provided and wait for the transaction to be completed. This can take several minutes, depending on the exchange and the currency you trade for.

Note: Prerequisite: Enable the desired exchange bot.

- 1. Open Swap -> BOT MANAGEMENT.
- 2. Choose an exchange and enable its bot by expanding its tile and then clicking on the *Enable bot* button.

3.3 Buy Process

The buying process of *Particl Marketplace* gives you more privacy, security, and censorship resistance than any other online marketplace. It is also entirely free to use except for the tiny sub-cent transaction fees usually associated with *cryptocurrency* transactions. The price to pay for these previously impossible benefits is that you are required to do things a bit differently than what you are used to.

Rest assured, it's not complicated at all. Just follow this quick user guide, and you'll be up to speed in no time!

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- Request Order
- Make Security Deposit
- Order Status Verification
- Receive Security Deposit Back

3.3.1 Request Order

Hint: Wallet Unlocking

To be able to progress through the purchasing process, your *Particl Desktop* client needs to be unlocked. Failure to do so means that you won't be able to complete the required steps to submit and complete your order. Make sure the padlock icon at the top-right corner of the status bar is unlocked.

To purchase an item on *Particl Marketplace*, you must first submit an order request to the seller. Keep in mind that, after you do this, you still need to complete one additional step before your order is properly confirmed, so keep reading this user guide until the end!

Add an item to your cart

- 1. Open Market -> BROWSE to find the item you want to purchase and click on it to expand its details.
- 2. Click on the *Shipping & Escrow* tab within the listing's details to ensure the item is shipping in your country and that you have enough PART *Anon* balance funds. You will find the number of PART required for the order within the *Total needed for order* column.
- 3. Click on Add to cart.

Submit order request to the seller

- 1. Open Market -> CART to review the content of your cart and enter your shipping information.
- 2. Click the *Review & Submit this Order* button to review your order's details and click the *Confirm Order & Submit* to send the bid to the seller.
- 3. Your order request has been submitted to the seller, who still has to confirm your order.

Hint: Save your shipping information into a user profile. That way, you do not need to rewrite it with every order. To do so, check the *Save shipping profile* box before moving to the next step and give the profile a name.

3.3.2 Make Security Deposit

Once the seller has confirmed your order, its status will change from *REQUESTING* to *ACCEPTED*; it's time to make your security deposit into the *two-party escrow smart-contract*. The security deposit of any order is always equal to the value of what's being purchased, including shipping costs.

- 1. Await the notification that the seller has accepted your order.
- 2. Open Market -> PURCHASES -> Orders and look for any order marked as ACCEPTED.
- 3. Click on the order's tile to expand its details, and click on the *Request Escrow*.
- 4. You can provide an email address or a phone number to help the seller. This step is optional.
- 5. Confirm your security deposit by clicking on the Confirm & Fund.

Hint: In the *Filter* section, you can check *Orders requiring attention* to only see orders that require your attention or filter them by status.

See also:

Have a look at Two-party Escrow Explained to know all about it!

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3.3.3 Order Status Verification

After locking your security deposit into the two-party escrow contract, all you need to do is wait to receive your item. At any point in time, you can verify the status of your order.

Once the seller marks your order as shipped, he may send you a tracking number.

1. Open *Market -> PURCHASES -> Orders* and find the order you want to monitor. Additional information, like a tracking number or notes, can be seen by clicking on the order's tile, which gives you access to more details.

3.3.4 Receive Security Deposit Back

After receiving your order, it's crucial to finalize the transaction on Particl Marketplace. That's how you get back your security deposit, without any fee, and release the payment to the seller.

- 1. Wait for your package to arrive.
- 2. Open Market -> PURCHASES -> Orders.
- 3. Click on the order's tile to expand its details, and click on the *Mark as delivered* button to complete the transaction and receive your security deposit back instantly.

Attention: It is crucial to return to *Particl Desktop* once you receive your order and mark it as complete. Without it, you won't recover your security deposit.

Hint: In the *Filter by status* section, you can check *SHIPPING* to only see orders that have been shipped by sellers but haven't arrived your way yet.

Customer's Frequently Asked Questions

How do I open the marketplace in order to see listings?

- 1. Be sure to have the latest version of *Particl Desktop* installed. The *Quickstart* guide may help you greatly.
- 2. After the initial startup, have some patience to let the *blockchain* sync in the background. On a fibre connection this takes up to 15 minutes. The following startups will sync-up way faster.
- 3. Click on *MARKET* -> *BROWSE* and wait until numbers start to count up beside the *REFRESH* button. As soon as the first numbers appear click on *REFRESH*. Listings appear.

Be sure you don't see any warnings in the top right "status" bar. If you still don't see any listings feel free to reach out on the community support channels. *Get Support*

What does each order status mean?

- · ORDER REQUEST: You have requested an order on an item and are now waiting for the vendor to accept it.
- ACCEPTED: The vendor has accepted your order and is now waiting for you to send the payment and your security deposit in escrow.
- ESCROW: You have locked your funds in escrow and are now waiting for the vendor to lock their security deposit
 as well.
- PACKAGING: The vendor is now packaging your order and getting it ready to ship.
- SHIPPING: The vendor has shipped your item and is now waiting for you to receive and confirm the delivery.
- *COMPLETE*: You have received your order and have confirmed the order as "complete". There are no more required actions in this transaction, and you've received your security deposit back.

Why isn't the seller updating my order after I placed a bid?

If your *Particl Desktop* is protected by a password (encrypted), **you need to unlock it with your password** to receive order updates. If you keep your client locked, you won't receive the notifications and won't be able to progress to the next step.

If your order is still not updated after unlocking your client, that's because the seller hasn't done it yet. Wait for the vendor to update the order, or try leaving them a message in the *Comments and Reviews* section of the listing page!

Why does the marketplace require me to pay twice the value of the item I want to buy?

That's because you need to fund the escrow contract with a security deposit equal to the total value of your order. This deposit will be refunded to you at no fee at all once the transaction is fully completed.

For example, if you're buying an item worth \$100 (including shipping), then you'll be required to deposit a total of \$200 into the escrow smart-contract. Half of this deposit is for the payment of the item to the seller (\$100), and the other half is your security deposit (\$100) which you'll get back, with no fee, after the transaction is completed.

To learn more about Particl's Two-Party Escrow system, head over to the *Two-Party Escrow System Explained* in-depth guide.

Can anyone else other than the seller see my shipping address?

No. Only the seller can access your shipping details. Neither Particl nor anyone else can collect your personal information. Particl is entirely decentralized, secure, and private by design.

How can I directly contact a seller?

You can leave a comment in a listing's *Comments and Reviews* section. This will notify the seller that they've received a message, and they'll be able to answer you. Keep in mind that the *Comments and Reviews* section is public, meaning all messages you and the seller leaves there are publicly visible.

Alternatively, sellers may sometimes leave their contact information such as an email address or instant messaging application username in their listing descriptions. Look in there and see if you can find something.

A more complete and private messaging/inbox system is being developed and will be added later during the Beta phase of development. To know what next features are planned for the *Particl Marketplace*, refer to Particl's development roadmap.

How can I ask for a refund or return through the marketplace?

Due to the current stage of development of the *Particl Marketplace* (Beta), this feature is currently not supported. If you want to ask a seller for a refund or return, please try to reach out to them by their provided contact information or through the *Comments and Reviews* section of the listing you have an issue with.

Direct messaging and a resolution center are planned features for later on during Beta. To know what next features are planned for the *Particl Marketplace*, refer to Particl's development roadmap.

Where can I find the tracking number of one of my orders?

When a seller leaves you a tracking number, you can check it out right from your Particl Desktop client. To do so, head over to the *Orders* page of the *SELL* section, find the order that you want to find the tracking number of, and click on it to expand its details.

A seller may not always leave a tracking number, but when they do, that's where you'll find it!

How can I cancel an order?

It's only possible to cancel an order if the seller hasn't yet accepted it. Otherwise, you can try reaching out to the seller by their provided contact information or through the *Comments and Reviews* section of the listing.

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3.4 Sell Process

The selling process of *Particl Marketplace* gives you more privacy, security, and censorship resistance than any other online marketplace. It is entirely free to use except for the tiny sub-cent transaction fees usually associated with *cryptocurrency* transactions. The price to pay for these previously impossible benefits is that you are required to do things a bit differently than what you are used to.

Rest assured, it's not complicated at all. Just follow this quick user guide, and you'll be up to speed in no time!

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- · Publish Items
 - Publish a Single Item
 - Publish Multiple Items at Once
- · Accept an Order
- Make the Security Deposit
- Package and Shipping an Order
- Receive and Verifying Payment

3.4.1 Publish Items

Attention: To put an item for sale on Particl, you need to have PART coins in your *Public* or *Anon* balance so that you can pay for the listing fees. Funds in your *Anon* balance are also required to make security deposits into escrow contracts (which are equal to the value of any item purchased by a buyer).

Hint: Wallet Unlocking

To receive orders or to complete order steps, your *Particl Desktop* client needs to be unlocked. You will not receive any order or get notifications on the progress of active orders if you keep your wallet locked. For this reason, make sure the padlock icon at the top-right corner of the status bar is unlocked.

To make a sale on Particl, you need to first put items up for sale. There are many ways to create listings on Particl. The right way for you depends on your requirements.

Publish a Single Item

If you only want to list a single item, then simply follow these steps.

Create a listing template

- 1. Open Market -> SELL -> Inventory & Products followed by the New button.
- 2. Fill up all the text boxes with the information on your listing and upload an (or multiple) image of your product or service.

If you want to publish now

- 1. Click on *Publish right away* tile to select which market you want to publish your listing and set the correct category for your item accordingly.
- 2. Click on the Save and Publish button and choose the duration time for the item's listing.
- 3. Click on Publish Listing.

Hint: After one (1) blockchain confirmation (approximately 2 minutes), your listing will be live on the previously selected market(s).

If you want to publish it later

Instead of publishing your listing immediately, you can save its template for later. When creating your listing template, instead of clicking on *Save and Publish*, you can click on the *Save* button to save your listing template and publish it later instead of right now.

- 1. Open *Market -> SELL -> Inventory & Products*, locate your saved listing, and click on its tile to expand the details. Its status will show as *Listing unpublished*.
- 2. You can still edit the listing by clicking on the *Edit* button or publish it by clicking the *Publish* icon (rocket).
- 3. You can also publish your listing in other community markets or storefronts by clicking on the green *Clone Product to Market* button and selecting which market (and category) you want to add your listing template to.
- 4. Choose the amount of time you want your listing to show up on the new market and click on *Publish Listing*.

Hint: After one (1) blockchain confirmation (approximately 2 minutes) your listing will be live on the previously selected market(s).

If you want to publish on multiple markets

You can also publish your listing on multiple community markets and storefronts. This option is only available if you have joined additional markets with publishing rights.

- 1. Open *Market -> SELL -> Inventory & Products*, locate the listing you want to publish on other community markets, and click on its tile to expand the details.
- 2. Click on the green *Clone Product to Market* button and select which market (and category) you want to add your listing template to.
- 3. Choose the amount of time you want your listing to show up on the new market and click on *Publish Listing*.

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Hint: After one (1) blockchain confirmation (approximately 2 minutes), your listing will be live on the previously selected market(s). From this moment, a new market will be connected to your listing template. Repeat these steps for all community markets you want to publish your listing on.

Publish Multiple Items at Once

If you are selling multiple items, then you may want to create a CSV inventory file and list all of your products at once. This will save you the time of listing each item one-by-one.

Publishing multiple listings at once is separated into two steps: (1) creating listing templates and (2) publishing them.

Create listing templates

The first step of the process is to import your inventory into *Particl Desktop* using a CSV file and create a listing template for each item.

- 1. Open Market -> SELL -> Inventory & Products followed by a click on the Import button.
- 2. To process your inventory, import your CSV file by clicking on the *Choose file* button of the *IMPORT FROM CSV FILE* section and click on the *Process CSV import* button.
- 3. One listing template per item will be created. Review each template and, if needed, click on their tiles to expand and edit their details.
- 4. Click *Import & Save* to create your listing templates.

Tip: You can download a .csv template file from the *Market -> SELL -> Inventory & Products -> Import* section after selecting *CSV file* as source.

(Re)Publish your listing templates

The second step of the process is to publish the listing templates you've just created.

- 1. Open Market -> SELL -> Inventory & Products followed by a click on the Batch (Re)publish... button.
- 2. Click *PUBLISH TO* to select on which markets you want to publish your listings.
- 3. Click *PUBLISH DURATION* to select for how long you want your listings to be available.
- 4. Click their *Publish* checkboxes or hit *Select all* in the *SELECT*... dropdown menu to individually choose the items you want to publish.
- 5. Click on *Publish selected products* and wait for *Particl Desktop* to publish your listings. A progress bar at the bottom of the screen indicates the progress.

3.4.2 Accept an Order

Attention: For your *Particl Desktop* client to receive any bid from buyers, it must be online and unlocked. New orders won't show up in your *Orders* or *Overview* until you unlock your wallet. To do so, click on the padlock icon in the status icons bar at the top right corner.

When a buyer wants to buy something you're selling, they'll first make an order request that you need to accept. Accepting an order indicates to your buyer that you are willing to process his order.

- 1. Open *Market -> SELL -> Orders* and check the *Orders requiring attention* checkbox to only see orders that require your attention or filter them by status.
- 2. Look for any new order marked as REQUESTING.
- 3. Click on the order's tile to expand its details and accept it by clicking on the Accept order request button.

3.4.3 Make the Security Deposit

Once you accept your buyer's order, they will be required to send their payment as well as a security deposit (equal to the cost of the item + shipping) into a *two-party escrow smart-contract*. Once that happens, you will be required to also send a security deposit that matches the one of your buyer.

- 1. Open *Market -> SELL -> Orders* and check *Orders requiring attention* to only see orders that require your attention or filter them by status.
- 2. Look for any order marked as *ESCROW*, click on the order's tile to expand its details, and make your security deposit by clicking on the *Complete escrow* button.
- 3. In the window that appears, you can leave your buyer a note. This is optional. Confirm your security deposit by clicking on the *Confirm & Fund*.

3.4.4 Package and Shipping an Order

After making your security deposit into the two-party escrow contract, you will need to process and ship your buyer's order.

- 1. Package and ship out your item.
- 2. Open *Market -> SELL -> Orders* and check *Orders requiring attention* to only see orders that require your attention or filter them by status.
- 3. Look for any order marked as *PACKAGING*, click on the tile to expand its details, add a package tracking number if needed, and click on the *Mark as shipped* button.
- 4. In the window that appears, you can send your buyer a tracking number. This is optional and can be used to send over other types of data as well (i.e., download link). Confirm the order as shipped by clicking on *Yes, Order is shipped*.

3.4. Sell Process 45

3.4.5 Receive and Verifying Payment

Once your package is shipped, keep an eye out for your payment. Once your buyer receives their order and marks the transaction as complete, you will receive your security deposit back as well as the full payment for the order, at no fee.

- 1. Open *Market -> SELL -> Orders* and check *Orders requiring attention* to only see orders that require your attention or filter them by status.
- 2. Check *COMPLETED* to only see orders that have been completed, click on the order's tile to expand its details and see the date and time it was completed.

See also:

Other sources for useful or more in-depth information:

- Particl Academy Two-Party Escrow Explained
- Particl Wiki Marketplace Fees
- Particl Website Particl's Roadmap

Vendor's Frequently Asked Questions

How can I edit or delete a listing after it has been published?

Due to the current stage of development of the *Particl Marketplace* (Beta), it is currently not possible. If you want to change the description or image of an item, please publish a new listing.

This functionality will be added at a later stage during the Beta phase of development. To know what next features are planned for the marketplace, refer to Particl's development roadmap.

How can I manage my inventory quantities?

Due to the current stage of development of the *Particl Marketplace* (Beta), it is currently not possible. This is, however, one of the next functionality that is going to be added to the marketplace. It will allow you to manage quantities for your products and various other variants such as sizes, colors, fabrics, etc.

To know what next features are planned for the marketplace, refer to Particl's development roadmap.

How can I offer item options such as size, color, and other variants?

Due to the current stage of development of the *Particl Marketplace* (Beta), it is currently not possible. This is, however, one of the next functionality that is going to be added to the marketplace. It will allow you to manage quantities for your products and various other attributes such as sizes, colors, fabrics, etc.

To know what next features are planned for the marketplace, refer to Particl's development roadmap.

For how long do listings stay on the marketplace?

That's all up to you! The expiry time for listings on the marketplace depends on the listing fee you pay. When publishing one or multiple listings, the *Particl Desktop* client will prompt you to select the number of days you want your listings to be published. Simply choose the number of days you prefer from the dropdown menu, and you're all set!

How can I republish listings after they've expired?

Go to the *Inventory & Products* tab of the *SELL* page and find the template of the listing you want to republish. Click on it to display more options and click on the publishing icon (rocket) next to the market(s) or storefront(s) you want to publish your listing in. You can publish the same listing in many different markets.

Alternatively, you can instead click on the *Batch* (*Re*)*publish*... button on the same page to open up the publishing tool. On there, you can publish multiple listings at once on any market or storefront you have publishing rights.

How can I reply to a question left on one of my listings?

Go to your marketplace *Overview* page and look for the *New questions* and *New answers* tiles. Clicking on them will bring you to the right page and show you all outstanding questions and replies.

Why does my product show up in "Reported listings", and what does this mean?

If one of your listings shows up in the *Reported listings* section, it means at least one person has flagged it as inappropriate. If enough people do the same, it will be taken off the marketplace entirely. If your listing shows up in the reported listings section but still shows up on the marketplace, it means that not enough people have voted to delete it.

Want to know more about Particl's marketplace moderation system? Head over to the *Marketplace Moderation Explained* in-depth guide!

Why are listing fees different between different items?

Listing fees are determined by two dynamic factors — the expiry time of the listing and its size (measured in kb). If you publish your listing for a long time, or if it contains many pictures and a large description, it will be more expensive to list than a smaller listing in comparison.

Vendor's Frequently Asked Questions Regarding Sell Orders

What does each order status mean?

- BIDDING: A buyer has made a bid on an item and is now waiting for you to accept it.
- ACCEPTED: You have accepted a bid on an item and are now waiting for the buyer to confirm payment and lock their funds (payment + security deposit) in escrow.
- ESCROW: The buyer has locked their funds in escrow and is now waiting for you to lock your security deposit as well.
- PACKAGING: The buyer is now waiting for you to package the order and ship it.
- *SHIPPING*: You have marked the item as shipped and are now waiting for the buyer to receive and confirm the delivery.
- *COMPLETE*: The item has been confirmed to be received by the buyer. There are no more required actions in this transaction, and you've received both the payment for the order and your security deposit back.

Why am I not receiving any new buy orders?

If your *Particl Desktop* client is protected by a password (encrypted), **you need to unlock it with your password** so that it can pick up new orders from the Particl network. If you keep your client locked, you won't receive any new orders, and you will not get any update on other ongoing orders.

How can I send a tracking number or note to my customer?

Once you mark an order as *SHIPPED* (*Package and Shipping an Order*), your *Particl Desktop* client will prompt you to enter a tracking number or note to your customer. It's an entirely optional step, but it helps your customers keep track of their order(s).

A complete messaging system will be added during the Beta phase of development. To know what next features are planned for the marketplace, refer to Particl's development roadmap.

How can I manage refunds and returns through the marketplace?

Due to the current stage of development of the *Particl Marketplace* (Beta), this feature is currently not supported. Direct messaging and a resolution center will be added at a later time during the Beta phase of development. To know what next features are planned for the marketplace, refer to Particl's development roadmap.

How can I directly contact a customer?

Due to the current stage of development of the *Particl Marketplace* (Beta), directly messaging a customer is not yet supported. You can, however, send a tracking number or note to your customer as part of the marketplace's transaction flow.

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A complete messaging system will be added at a later time during the Beta phase of development. To know what next features are planned for the marketplace, refer to Particl's development roadmap.

How can I cancel an order?

Due to the current stage of development of the *Particl Marketplace* (Beta), it's currently not possible to cancel an order once you have fully locked your security deposit in escrow.

Direct messaging and escrow management/negotiations will be added later during the Beta phase of development. This will let you communicate with your buyer and cancel, update, or resolve orders.

To know what next features are planned for the marketplace, refer to Particl's development roadmap.

3.5 Markets & Storefronts

The main difference between markets and storefronts is who has the right to post listings in them. A market allows anyone to post listings, whereas a storefront only allows those with a specific publishing key.

Note: To simplify the terminology, "markets" and "storefronts" are referred to as "community markets".

Create and join an unlimited number of community markets with the *Particl Marketplace*. Each of these markets can host an equally-unlimited number of listings and live independently from the predefined *Open Market*.

By default, a community market isn't publicly visible and is only known to its creator. However, a community market can be promoted within the *Market Browser*, making it available to join at the click of a button. Of course, you can grant direct access as well.

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- Browse the Markets
- Join a Market
- Flag Markets
- Vote to Keep a Market

3.5.1 Create a Community Market

These four steps aren't hard to follow, and they can help you start a brand new journey for you or your business.

- 1. Open Market -> MANAGE MARKETS -> Your Markets and click on the Create new Market button to start the market creation process.
- 2. Enter a title, a short description, a picture for your market, and then choose the region your market targets (can be worldwide).
- 3. Select the *Community Market* or *Storefront* option depending on your preference.
- 4. Click on Confirm & Create Market to review the details of your market.

Your community market is now created. You can promote it to the Market Browser so that anyone can easily access it or keep its Market ID and Access Key private. Doing that will let you share the access information to only the people you want to.

Attention: Anyone with access to the Publish Key (storefont) can share it with anyone else. Only share the Publish Key with people you trust and know won't leak it out.

Publish Listings

To publish listings to your new community market, go through the normal *product listing process* and choose your community market when ready to publish your item(s).

3.5.2 Promote a Market

Make your community market publicly visible in the *Market Browser* and let anyone in the world join it and purchase items.

- 1. Open Market -> MANAGE MARKETS -> Your Markets.
- 2. Click on the market tile you want to promote and click on the *Promote in Market Browser* icon at the bottom of the expanded tile to open the market promotion window.
- 3. Select the number of days you want to promote your market and confirm with a click on *Promote Market* to promote it.

Hint: Anyone is able and free to promote any market they wish.

3.5.3 Browse the Markets

Explore and join all the community markets that their creators or other community members have promoted.

- 1. Open Market -> MANAGE MARKETS -> Browser.
- 2. Browse the publicly accessible community markets and find one you want to join.
- 3. Click on its tile to expand its options and click on Join this Market to connect to it.

Hint:

- 1. Open Market -> MANAGE MARKETS -> Your Markets to see all the markets you have joined.
- 2. You can browse the market's listings by *Market -> BROWSE* and selecting the community market in the *FILTER* section.

3.5.4 Join a Market

If you have in your possession the Market ID and Access/Publish Key of a particular community market, you can directly join it even if it's not promoted on the Market Browser. If you only have the Access Key of a storefront, you will only be able to buy items. If you instead possess its Publish Key, then you'll be able to join as a full vendor and also sell items.

- 1. First, make sure you possess the Market ID and Market Access Key of the market/storefront you want to join. You may need to collect this information from private sources if its creator or users do not publicly broadcast them
- 2. Open Market -> MANAGE MARKETS -> Browser and click on the Join via Market ID button to expand the window to join a new market.
- 3. Fill in the community market's information. You can entirely decide this information to help you better organize your markets and know what they're about.
- 4. Enter the community market's Market ID and Access/Publish Key, and then click on the *Join this Market* button to join the community market.

Hint:

- 1. Open Market -> MANAGE MARKETS -> Your Markets to see all the markets you have joined.
- 2. You can browse the market's listings by *Market -> BROWSE* and selecting the community market in the *FILTER* section.

3.5.5 Flag Markets

If you see a community market with inappropriate content, you can flag it to the rest of the Particl community. If enough people flag the market, it will be taken down from the *Particl Network* altogether. To learn more about the *Particl Marketplace* moderation mechanism, read *Market Moderation Explained*.

- 1. Open Market -> MANAGE MARKETS -> Your Markets.
- 2. Click on the tile of the community market you want to flag to expand its options.
- 3. Click on *Report Inappropriate Market* to open the Flagging window and click on the *Flag this market* button to flag it.

Hint: The total number of coins you hold in your *Public* balance will now be used as downvotes for this community market. If the market's moderation score goes below -9,000 PART, it will be taken off the *Particl Network*.

3.5.6 Vote to Keep a Market

Sometimes, other users may flag community markets that you believe should remain on Particl. In those cases, you need to make your voice hear. To learn more about the *Particl Marketplace* moderation mechanism, read *Market Moderation Explained*.

- 1. Open Market -> MANAGE MARKETS -> Your Markets.
- 2. Click on the tile of the flagged market you believe should remain on Particl. Flagged markets will have their flag icon highlighted in red instead of black.

3. In the window that appears, click on the *Keep Market* green button to confirm that you believe this market shouldn't be moderated out.

Hint: The number of coins you hold in your *Public* balance will now be used as upvotes for this community market. As long as the market's overall moderation score doesn't go below -9,000 PART, the market will remain on the *Particl Network*.

3.6 Staking and Voting

Just by keeping an open connection to the *Particl Blockchain*, you automatically earn a yearly interest rate of 4% to 8% on the total number of PART coins you hold in your public balance.

It also grants you the ability to vote on various community proposals using your staking power as voting power.

See also:

• Particl Academy - In-Depth Staking Explained

Table of Contents

- Staking
 - Enable regular staking
 - Enable cold staking
 - Connect to a staking pool
 - Enable mobile staking
 - Adjust your staking privacy
- Voting on Proposals

3.6.1 Staking

Enabling staking is generally straightforward, but some of the staking solutions available on Particl may require more work to set up. This user guide will walk you through the process of enabling any of these solutions without too much hassle.

Note: Prerequisites

- A Particl Desktop wallet containing more than 0 PART coins.
- PART coins in your *Public* balance.
- An active internet connection.
- A separate device to convert into a staking *node* (required for cold staking only).

There are multiple ways you can stake your PART coins. Each of these solutions has pros and cons as well as its own method of activation.

Enable regular staking

Activating regular staking is the fastest method to get started. All it requires you to do is open up the *Particl Desktop* client and "unlock your wallet for staking only". Regular staking, however, requires your computer to be open and connected to the internet 24/7.

Non-password protected client

1. Launch your Particl Desktop client and make sure you have PART coins in your Public balance.

That's all. Staking is working as long as your *node* is online.

Password protected client

- 1. Launch your *Particl Desktop* client and make sure you have PART coins in your *Public* balance.
- 2. Click the *Padlock* icon at the top right corner of your client.
- 3. Click on the downward-facing arrow next to Additional unlock options in the overlay window.
- 4. Check the *Unlock for staking only* box.
- 5. Enter your password and click the *Unlock wallet* button.

Enable cold staking

Cold staking is a more advanced, secure, and flexible staking option. It requires you to have a separate device that can remain connected to the internet at all times. This can be a hardware device like a Raspberry Pi, but it can also be a VPS or a cloud server (i.e., DigitalOcean, AWS, Google Cloud, etc.).

On your staking device...

Choose what device you want to use as a staking *node* (i.e., Raspberry Pi) and install a Linux (i.e., Raspbian) distribution on it.

- 1. Choose what device you want to use as a staking *node* (i.e., Raspberry Pi) and install a Linux (i.e., Raspbian) distribution on it.
- 2. Install dependencies and download Particl's cold staking app; Partyman.

```
sudo apt-get install python git unzip pv jq dnsutilscd

cd ~ && git clone https://github.com/dasource/partyman
```

3. Install *Particl Core* on your staking device.

```
partyman/partyman install
```

If you already have Particl Core installed, update it.

```
partyman/partyman update
```

4. Once Particl Core is installed, restart Partyman.

```
partyman/partyman restart
```

5. Create a new Particl wallet on your staking *node*.

```
partyman/partyman stakingnode init
```

6. Create a new staking public key. It will let you connect your PART coins to the staking *node*.

```
partyman/partyman stakingnode new
```

Note or copy this staking public key. You will need it for the next steps.

On Particl Desktop...

- 1. Make sure you have PART coins in your *Public* balance.
- 2. In the Wallet module of *Particl Desktop*, navigate to the *Overview* page.
- 3. Click on the downward-facing arrow in the *Cold staking* widget on the right of your screen.
- 4. Click on the blue *Set up cold staking* button to enter your staking public key in the designated space and confirm with a click on the *Enable cold staking* button.
 - Enter your password when prompted to.
- 5. To fully activate cold staking, click on the Zap button to instantly bring the progress bar to 100%.

A few cold staking settings...

There are a few cold staking settings that you can set up. To do so, go back to your staking *node* and enter the following commands.

```
## View your staking statistics.
partyman/partyman stakingnode stats

## Send your staking rewards to any PART address (public balance) of your choice.
partyman/partyman stakingnode rewardaddress

## Configure your marketplace fee preference (more about this setting `here <https://
--particl.news/adjusting-listing-fees-4b676e230601>`_).
partyman/partyman stakingnode smsgfeeratetarget

##Create secure firewall rules that only allow the required ports to connect to the_______
--internet.
partyman/partyman firewall
```

Connect to a staking pool

Another way to stake your PART coins is to team with other stakers and combine your staking power. This will give you more frequent but smaller staking rewards. To do so, you need to connect your Particl wallet to a staking pool.

Pool Name	URL/IP	Pool Fees
ColdStakingPool	https://coldstakingpool.com/	2.5%
Particl.Page	https://pool.particl.page/	2.5%
Crymel's Pool	https://particl.crymel.icu/	2.5%
CoinRollin	https://coinroll.in/	1%

- 1. Choose the staking pool you want to use from the list above, open its website, and copy the pool's staking address. (looks like pcs19453kf98kz47yktqv7x36j39xa07mtvqx8evse).
- 2. Open up your Particl Desktop client and make sure you have PART coins in your Public balance.
- 3. In the Wallet module of *Particl Desktop*, navigate to the *Overview* page.
- 4. Click on the downward-facing arrow in the *Cold staking* widget on the right of your screen.

- 5. Click on the blue *Set up cold staking* button to enter your staking public key in the designated space and confirm with a click on the *Enable cold staking* button.
 - Enter your password when prompted to.
- 6. To fully activate cold staking, click on the Zap button to instantly bring the progress bar to 100%.
 - Enter your password when prompted to.

Enable mobile staking

It's also possible to stake PART coins stored on a mobile wallet such as Particl Copay. Staking on your phone is completely secure and requires you to delegate the staking power of your coins to a staking *node*.

- 1. Set up a *Cold staking node* and copy its public key or copy the public key of a *Staking pools* key into your clipboard.
- Download and install the Particl Copay mobile application, open it, create a new Particl wallet, and send PART coins to it.
- 3. After your coins are deposited into this wallet, tap on the *Staking* icon at the bottom right corner of the screen, followed by a tap on the *Setup Cold Staking* green button.
- 4. Enter the staking public key in the designated space and give it a label.
- 5. Tap on the Enable Cold Staking green button, then tap the Zap button to finalize the staking setup process.

Adjust your staking privacy

If you operate your own staking *node*, you can adjust your level of staking privacy. By default, the network sends your staking rewards in your *Public* balance, meaning all your staking rewards are publicly displayed on the blockchain. Particl allows you to change that for better privacy.

- Public balance: Staking rewards are fully transparent and public on the blockchain.
- Blind balance: The number of PART coins contained in each reward remains confidential.
- *Anon* balance: The number of PART coins AND your deposit address remain entirely anonymous. This is the highest level of staking privacy possible on Particl.
- 1. Access your staking *node* and install the Private Staking script.

```
cd ~ && git clone https://github.com/GBen1/Private-Coldstaking.git
```

2. Open the script's directory and launch the script and go through the setup process.

```
cd ~/Private-Coldstaking && ./privatecoldstaking.sh
```

- 3. Choose the type of balance you'd like to receive your staking rewards to and copy the new staking public key provided by the script.
- 4. Verify that the script has been activated and properly set up.

```
./update.sh
```

5. In your *Particl Desktop* client, navigate to the Wallet module's *Overview* page and enter the public key in the cold staking widget. If you already have cold staking enabled, you will need to disable cold staking first.

If you want to uninstall the script, enter this command.

cd ~/Private-Colstaking && ./uninstall.sh

Coin Staking FAQ

Why are some of my coins aren't staking after receiving my last staking reward?

When staking, your coins are separated into multiple outputs. Each output stakes separately with the hopes of finding and verifying a block.

When one of your outputs stakes a block, or when you receive a transaction, the output is temporarily unavailable until it can be moved or stake blocks again. This process is referred to as "maturing" and lasts for 225 blocks (~8 hours).

Once your output is mature once again, you'll be able to transact the coins it contains, and it'll be able to stake blocks once again.

3.6.2 Voting on Proposals

You can vote on various community proposals using your staking power as voting power. Register your voting preferences during a proposal's voting period; every time you'll stake a block during that period, you'll cast one vote.

The more blocks you stake within a proposal's voting period, the more voting power you have.

Note: Prerequisites

- A Particl node actively staking.
- · An active internet connection.

Partyman

Particl Desktop

Particl Qt

Partyman Staking App

1. Access your Partyman staking node and enter Partyman's folder.

```
cd ~/partyman
```

2. Make sure Partyman is on the latest version.

```
git pull
```

3. Still in Partyman's folder, find what proposal you want to vote for.

```
./partyman proposal list
```

4. Vote on the proposal by typing the following command.

```
./partyman proposal vote
```

5. Confirm that you want to vote for a proposal. This will clear all previous voting preferences if you're already voting on a proposal.

- 6. Enter the ID of the proposal you want to vote for and press *Enter*.
- 7. Enter the voting option you want to cast your vote for and press *Enter*.

Particl Desktop

- 1. Open your Particl Desktop client.
- 2. Find what proposal you want to vote for by visiting the CCS platform. Note the ID of the proposal and the block numbers.
- 3. Click on the debug console icon at the top right corner of the screen.
- 4. In the console window, type the following command.

```
setvote proposal option height_start height_end
```

proposal should be the ID of the proposal you want to vote for

option should be the value of your voting option (i.e., 1 = "Voting for the proposal")

height_start is the block number when the voting period starts

height_end is when it ends

Particl Qt

- 1. Open your Particl Qt client.
- 2. Find what proposal you want to vote for by visiting the CCS platform. Note the ID of the proposal and the block numbers.
- 3. Click on the Window tab at the top of the client and then go to *Console*.
- 4. In the console window, make sure that the wallet with your coins staking is selected in the dropdown menu. If you don't select the wallet that is staking your coins, your vote will not register. Enter the following command to register your vote.

```
setvote proposal option height_start height_end
```

proposal should be the ID of the proposal you want to vote for

option should be the value of your voting option (i.e., 1 = "Voting for the proposal")

height_start is the block number when the voting period starts

height_end is when it ends

See also:

Other sources for useful or more in-depth information:

- Particl Academy In-Depth Staking Explained
- Particl Wiki Learn staking
- Particl Wiki Tutorials

3.7 Buyer Best Practices

Particl Marketplace is a *trustless marketplace*, meaning that no single party controls it. Instead, the marketplace runs autonomously on a decentralized network that shifts the balance of responsibilities on the users rather than on the platform's company. That means you'll be interacting, directly and with no other party in between, with your customers.

For this reason, it is well-advised for you to follow a range of best practices to fully enjoy all the benefits that *Particl Marketplace* and the global free market have to offer while avoiding any bump.

3.7.1 Buyer's General

Understanding Particl Marketplace as a buyer

- Make sure you know how *Particl Marketplace* and its various features work. The best way to do just that is to read the documentation contained here on the Particl Academy.
- When first launching *Particl Marketplace*, it can take several minutes for it to sync with the *Particl Blockchain* and *SMSG Network*. If you don't see any listing, it's most likely because your client is still syncing. Just give it some more minutes to complete the process.
- Because you can't decipher any order update when your Particl Desktop client is locked, make sure to unlock it
 before you start processing and working on orders. If you don't unlock your client, you won't see updates until
 you do.
- When placing an order with a seller, keep in mind that you still have *two additional steps* that you need to take. These extra steps are there to protect you from fraud.

3.7.2 Buyer's Transaction Process

Buyer Due Diligence

- Because *Particl Marketplace* cannot enforce any refund or reship policy, you'll have to come to a mutual agreement with the seller if an issue arises. Before making a purchase, make sure to read the entire listing description. Sometimes, the seller may leave an email address or another way to contact them.
- Check if an item has received comments or feedback from other users. That can give you additional information or answer some of your questions. If there aren't any, you can leave a question to the seller yourself, and others will then be able to see it.
- Always make sure to properly read an item's description before you buy.

Placing an order as a buyer

- Ensure you have at least twice the number of PART required to pay for the item and its shipping. That's because you need to make a security deposit of 100% of the order to participate in the *two-party escrow contract*. The security deposit is refunded to you, without any fee, once the transaction is fully completed.
- Regularly check your *Particl Desktop* client after placing a bid. You have one extra step (send funds to the escrow contract) to complete before the seller can ship your item.
- To receive updates on your active orders, your *Particl Desktop* client needs to be unlocked. If you keep it unlocked, you won't receive any update on your orders, preventing the seller from shipping your item(s).
- When sending a bid on an item (placing an order), you can optionally provide a phone number and/or email address. While this is entirely optional, it can help if any issue arises throughout the transaction process.

Completing an order as a buyer

- After you receive your ordered item, don't forget to complete the order on *Particl Desktop*. That's the last step required to close the deal. Failure to manually complete the order will prevent you and the seller from receiving your respective security deposits.
- After you complete an order, don't hesitate to leave a review, comment, or feedback on the item's listing. That'll let other potential buyers get helpful information for their own due diligence.
- If there's an issue with an item you've bought, but you have already completed the order, you can always leave a comment on the item's listing page and try to reach a mutual agreement with the seller. Alternatively, if the seller has provided an external means of communication (i.e., their email address), you can reach out to them directly this way.

Dispute management as a buyer

- If you encounter an issue or problem with an order while the escrow contract is still active, try to get in touch with the seller and find a mutually agreeable resolution. Stay calm, polite, and explain in detail what the issue is. You will need the seller to agree to the proposed solution for the funds locked in *escrow* to be released.
- If you suspect the seller is not acting honestly or fairly, you can refuse to unlock the escrow contract until a resolution can be mutually agreed upon. While doing that will prevent you from getting your security deposit until a solution is found, that will also prevent the seller from getting his security deposit and your payment for the item. If a seller refuses to cooperate, you can hold them accountable this way.

Article not received/broken from seller

- Always verify the tracking number provided by the seller before claiming a product has been lost in the mail or hasn't shipped.
- Call the shipping service provider with your tracking number to determine whether there has been an error in shipping the package or its processing.
- Provide your phone number and/or email to the seller when making a purchase. If there's an issue with the package, it will be easier to resolve.
- Refer to the shipping time estimates that the seller has provided on the item's listing. Keep in mind that these
 are only estimates; actual shipping time is unpredictable and can take longer than estimates provided by shipping
 carriers.
- If you truly believe an item has been lost in the mail or has arrived broken, try to get in contact with the seller and find a mutually agreeable resolution. Honest sellers always strive to keep their customers happy and satisfied.

3.8 Seller Best Practices

Particl Marketplace is a trustless marketplace, meaning that no single party controls it. Instead, the marketplace runs autonomously on a decentralized network that shifts the balance of responsibilities on the users rather than on a platform's company. That means you'll be interacting, directly and with no other party in between, with the seller of a product.

For this reason, it is well-advised for you to follow a range of best practices to fully enjoy all the benefits that *Particl Marketplace* and the free market have to offer while avoiding any bump.

3.8.1 Seller's General

Understanding Particl Marketplace as a seller

- Make sure you know how *Particl Marketplace* and its various features work. The best way to do just that is to read the documentation contained here on the Particl Academy.
- When first launching *Particl Marketplace*, it can take several minutes for it to sync with the *Particl Blockchain* and *SMSG Network*. If you don't see any listing, it's most likely because your client is still syncing. Just give it some more minutes to complete the process.
- Because you can't decipher new orders or updates on active orders when your *Particl Desktop* client is locked, make sure to unlock it before you start processing and working on orders. If you don't unlock your client, you won't see new orders or updates until you do.
- After accepting an order from a buyer, keep in mind that you still have *two additional steps* that you need to take. These extra steps are there to protect you from fraud.

3.8.2 Seller's Customer Care

Dispute management as a seller

- Because there is no internal messaging feature on *Particl Marketplace* yet, it is recommended to provide your customers with an external means of communication (i.e., your email address) to resolve any potential issue. This is, however, completely optional and up to you.
- Remain neutral, comprehensive, and show your customer you are willing to work through the issue. You need your customer to be satisfied with the proposed resolution(s) for funds locked in *escrow* to be released.

Dispute prevention as a seller

- Respond in a timely manner to Comments and Reviews
- Be as clear and straightforward as possible in your product description. Avoid hyperboles and misrepresentations.
- Provide accurate and realistic shipping time estimates.
- Put in place a solid and unambiguous after-sale policy with clear return and refund policies.
- Because there is no internal messaging feature on *Particl Marketplace* yet, it is recommended to provide your customers with an external and secure means of communication (i.e., your email address) to discuss any issue or matter that could lead to a conflict. This is, however, completely optional and up to you.
- Recommend to your customers that they leave a phone number so that a shipping service provider can contact them if required.

Customer's article not received/broken

- · Always verify the tracking number when a customer claims they have not received a product.
- Call the shipping service provider to determine whether there has been an error in shipping the package or its processing.
- Put your phone number and return address on the package when shipping. If there's an issue with the package, it can then safely be returned to you, or the shipping service provider will call you to resolve the matter.

Tracking numbers as a seller

- When marking an order has "shipping", you have an option to send your customer a note. This is where you can put the tracking number of the delivery. You can also type in any other information relevant to the order.
- It is recommended to keep a copy of the tracking number until the buyer confirms that they have received the delivery. That will help you in case a dispute arises.
- Because the customer expects a secure and private e-commerce experience from *Particl Marketplace*, please keep any information or data you save about your customers or orders secured and confidential.
- Funds, Coins, and Balances
- Obtaining PART
- Buy Process for Customers
- Sell Process for Vendors
- Markets and Storefronts
- Staking Rewards
- Best Practices for Buyers
- Best Practices for Vendors

PARTICL EXPLAINED

Find advanced, very in-depth, and detailed articles about functions and concepts behind the *Particl Marketplace*. They will make you a master, but you do not need them to use the *Particl Marketplace*:

4.1 Particl Marketplace Explained

This article is a technical explanation for the more curious minds.

With the award-winning *Particl Marketplace*, you transform today's e-commerce into a free, secure, cost-efficient, and trustworthy environment where you can enjoy true free market conditions. How this all comes together is explained in this section.

Understanding the Basics of Particl Marketplace

- Particl Academy Intro What You Gain
- Particl Academy Intro Target Audiences
- Particl Academy Intro Particl Marketplace Brief Overview

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- Characteristics
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 - The Data Storage Network (DSN)
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4.1.1 Characteristics

While the *Particl Marketplace* is an easy-to-use e-commerce platform, what happens in the background is relatively complex and employs several brand-new technologies. There's no server, central database, or employees working at keeping the marketplace up and running. Instead, it relies on an intricate combination of distributed technologies developed, maintained, and run by a vast and global network of participants.

- Autonomous runs by itself and requires no human intervention
- Secure has the highest level of digital security provided by trustless encryption
- Private no data or personal information is ever collected about you
- **Resilient** can't be censored or shut down by anyone
- Censorship-proof no predefined rules or policies, and no ban on items
- Near-zero fee only pay the bare minimum for the network to run by itself

These advantages are only possible thanks to the uniquely decentralized nature of the Particl Marketplace.

4.1.2 Technicals in a Nutshell

Particl Marketplace is an application on the *Particl Desktop* client. It uses Particl's *Open Market Protocol (OMP)* to connect and interact with the *Particl Network*. That's the backbone for the *decentralized* payments, communications, security, and privacy capabilities of the marketplace.

The Particl Network is a combination of the Particl Blockchain and the SecureMessaging (SMSG).

The blockchain executes and verifies all financial transactions using its native and untraceable currency, *PART*. Therefore, all transactions on the *Particl Marketplace* are private and confidential by default.

On the other end, the *SecureMessaging (SMSG)* protocol processes all the non-financial data related to the *decentralized* marketplace and securely broadcasts it to the rest of the network using military-grade encryption.

The *Particl Network* is entirely trustless and requires no third-party to function.

4.1.3 The Front-End

The front-end part of any application or platform refers to what a user directly interacts with. It is, more directly, the graphical interface.

Particl Desktop & Marketplace

Particl Desktop is the front-end application of the *Particl Network*; it allows you to connect directly with the underlying platform code in a graphical, user-friendly, and easy-to-use fashion.

If you want to sell or purchase an item on *Particl Marketplace*, browse listings and markets, leave a comment, or any other similar action, you inevitably need to use *Particl Marketplace*, the front-end application of Particl to do so. It is what makes all the code appear visually.

Note: A web and a mobile version of *Particl Marketplace* are planned to be released later on and will play a key role in making the platform more accessible and convenient to use.

Note: Particl Desktop and Particl Marketplace are ever-ongoing works in progress. Every day, they get better, easier to use, and more accessible for all. Exciting new projects and features constantly emerge to help the Particl ecosystem thrive.

See also:

- Particl Academy All Functions
- Github Particl Desktop

4.1.4 The Back-end

The back-end of any application or platform refers to the part that is not directly accessed by the user, typically responsible for storing and manipulating data. These are the various protocols, including the *Particl Blockchain*, that bring the *Particl Ecosystem* to life.

The Open Market Protocol (OMP)

The *Open Market Protocol (OMP)* is the back-end protocol that makes *Particl Marketplace* possible. It is the framework that defines how marketplace transactions, orders, listings, and other key e-commerce functionalities are to be processed by the *SecureMessaging (SMSG)* network and the *Particl Blockchain*. It is the "glue" that sticks everything together.

If *Particl Desktop* is what people use to access *Particl Marketplace* (the front-end), the OMP is what makes it possible in the background (the back-end).

See also:

- Particl Wiki Open Market Protocol
- Particl Wiki SecureMessaging
- Github Particl Market
- Github OMP Lib
- Github Particl RPC Documentation

The Particl Blockchain

The *Particl Blockchain* is a decentralized, immutable, and censorship-proof ledger. It is based on the Bitcoin technology and has been carefully enhanced by the Particl team to provide a more robust level of privacy by using a combination of industry-leading privacy technologies.

The *Particl Blockchain* processes and validates payments between two users without requiring any third-party such as a bank or a payment processor.

The PART Coin

PART is the *cryptocurrency* of the *Particl blockchain*. It is a secure and confidential currency explicitly designed to power e-commerce and online marketplaces. It uses several security, encryption, and privacy protocols to make sure none of your personal information and data can be collected when transacting on the *cryptocurrency*.

See also:

- · Github Particl Core
- Block Explorer Insight
- Particl Academy Blockchain Specifications
- Particl Academy PART Coin

The SecureMessaging (SMSG protocol)

SecureMessaging (SMSG protocol) is a decentralized storage network (DSN) to store and transfer data between nodes in a privacy-preserving manner. It enables a private and secure environment for e-commerce and communications between users.

SMSG powers the Particl Marketplace without bloating the blockchain with excessive data and without leaving any permanent record.

Note: A new version of *SMSG* is scheduled to be released later on. This massive update will significantly improve the network's scalability, performance, and reliability. This will make consumer-level adoption of Particl products possible.

See also:

- Github Particl Core
- Particl Wiki SecureMessaging

The Data Storage Network (DSN)

Data Storage Network (DSN) is a generic term that describes a specific set of software that store and retrieve data on the internet.

The default (and for the moment, the only) DSN used on Particl is the *SMSG network*. It is a P2P BitMessage-like message mixnet that runs parallel to Particl's blockchain. It is hosted on the same nodes that run the Particl blockchain.

Contrary to on-chain storage, storing data on DSN allows the platform to scale well regardless of the amount of data it uses. This form of storage works without relying on servers and without centralizing powers into masternodes.

See also:

- · Github Particl Core
- Particl Wiki Data Storage Network

4.1.5 Trustless Setup

Particl Marketplace is based on a completely trustless setup. That means that it doesn't require participants to know or trust each other or a third-party for the platform to function.

Additionally, a trustless setup implies that no single entity has any authority or special power over the platform. Instead, actions executed by the platforms follow a rigid set of rules that are open for all to see.

In general, trustless setups, such as *Particl Marketplace*, require a learning curve because they operate differently from traditional, trust-based setups (i.e., eBay).

However, the benefits are many. These setups tend to be faster, more efficient, cheaper, and typically offer more privacy and security to participants and their data.

4.1.6 Technicals of a Buy Flow

When making a purchase or a sale on *Particl Marketplace*, the process may look simple from the outside looking in. That's due to the platform's user-friendly user interface (the front-end).

In reality, there's a lot happening behind the scene (the back-end). When making a transaction on *Particl Marketplace*, you have to go through a few steps, each one leading to back-end actions.

Communication between the two participants, exchange of data, and the progress through transaction steps are made securely using the trustless *SMSG network*. The funds (payment and security deposits), on the other end, are held in an *escrow smart-contract* on the *Particl Blockchain*.

Here is an explanation of what happens, in the back-end, for each step of a marketplace transaction.

- *BIDDING*: A buyer has an order on an item and is now waiting for the seller to accept it. At this point, the blockchain reserves the buyer's funds (payment + security deposit) for escrow, but they are not entirely locked yet. This is referred to as "soft-locking".
- ACCEPTED: The seller has accepted the bid. The seller's funds (security deposit) are also now soft-locked for the escrow deposit.
- ESCROW: The buyer has completed the escrow deposit, meaning the funds are now fully locked. They will only be released when both participants agree to release the escrow. This step also automatically locks the seller's funds in escrow.
- *PACKAGING*: The seller is packaging the order and getting it ready to ship. Nothing happens on the blockchain at this point.
- SHIPPING: The seller has confirmed the order as shipped. Nothing happens on the blockchain at this point.
- *COMPLETE*: The item has been delivered. No problem was identified by the buyer, which has finalized the order. This causes funds locked in escrow to be released to each participant. The seller gets the payment for the item and his security deposit back, while the buyer only gets his security deposit back.

4.2 Currency (PART) Explained

PART is the untraceable *cryptocurrency* of the *Particl Blockchain*; a *blockchain* based on the Bitcoin code on which several privacy and utility technologies have been added. It enables you to make independent, secure, borderless, and private payments without requiring any third-party like a bank or a payment processor.

PART is also the settlement currency of the *Particl Marketplace*. Regardless of the currency used by the buyer to initiate a transaction, all payments on the marketplace are ultimately converted into PART before the *escrow stage*.

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 - Cold staking pools
 - On-chain voting right
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 - Anon transactions
- · Marketplace Payments and Settlements

4.2.1 What are cryptocurrencies?

Cryptocurrencies are digital units of currency. They can be transferred person-to-person without requiring any third-party (like a bank or a payment processor) to facilitate transactions. They enable near-free, near-instant, and borderless currency transactions that cannot be held up, blocked, reversed (chargebacks), or delayed by any party.

What are their benefits?

- They can be used anywhere in the world, at any time (100% uptime).
- Transactions are near-free; usually just a few cents or even less per transaction.
- Transactions are near-instant; they usually take a few seconds or minutes for they're fully settled.
- Transactions cannot be reversed (no chargebacks).
- You keep complete control of your financial data.

A few things to keep in mind...

- Payments are sent to unique cryptographic addresses similar to bank account numbers.
- Once you send a payment, you cannot modify or cancel it. Always double-check the payment details before making a transaction.

- You and only you are responsible for the security of your funds. They cannot be retrieved if you lose your password(s) or control over your wallets(s).
- The price of almost any cryptocurrency is volatile by nature and based on the concept of supply and demand.

4.2.2 Blockchain Specifications

PART is the *cryptocurrency* of the *Particl blockchain*. It is a secure and confidential currency explicitly designed to power e-commerce and financial platforms. It uses several security, cryptographic, and privacy-preserving protocols to make sure none of your personal information and data can be collected when transacting on the *Particl Marketplace*.

PART was released back in 2017 and is based on the latest version of the Bitcoin code (currently Bitcoin 0.21.1.0). The Particl codebase contains many modern-day improvements and additional features not present in the Bitcoin code. This makes it a faster, more private, and more flexible version of Bitcoin.

Native Blockchain	Particl
Blockchain Codebase	Particl Core 0.19.2.15
Codebase Origin	Bitcoin 0.21.1.0
Block Time	120 seconds (5x faster than Bitcoin)
Block Size	2 MB (2x more capacity than Bitcoin)
Consensus Mechanism	Particl Proof-of-Stake (PPoS)
Circulating Supply	~11.5M (100%)
Inflation Rate	8% per year (4% to stakers, 4% to decentralized treasury)
Segwit	Enabled
Lightning Network	Enabled
Atomic Swaps	Enabled (Particl DEX coming soon)

4.2.3 Staking Specifications

Particl uses the *Particl Proof-of-Stake* (*PPoS*) consensus mechanism. It pays back interest in dividend-like payments to stakers in exchange for securing the network. *PPoS* offers many secure staking options that let you easily and quickly earn rewards without any of the security or financial risks typically associated with staking.

PPoS is also what Particl's community governance system uses to let you cast votes on proposals.

Cold staking protocol

Particl's cold staking protocol allows you to securely delegate your staking power to a staking-only node that contains no coin. This lets your earn interest payments (*staking rewards*) on your PART coins, even if they're stored offline.

It enables true and secure staking on cold wallets, hardware devices (i.e., Ledger Nano), mobile wallets, cloud servers, or even just a piece of paper. Staking-only nodes do not have access to the coins they are staking, meaning they are hackproof.

Cold staking pools

You can join a cold staking pool to team up with other stakers and combine your staking powers. This leads to more frequent rewards in exchange for a small fee paid to the pool operator. Cold staking pools are ideal if you have a smaller balance or don't want to manage a staking node yourself.

On-chain voting right

Particl's *community governance* is powered by *PPoS*. By staking, you can *vote on community proposals* using your staking power as voting power. When voting on a proposal, any block you stake during the voting period will cast a vote. The more blocks you stake during a proposal's voting period, the more votes you cast.

Staking Revenue	4% to ~8% per year
Cold Staking	Yes
Staking Pools	Yes
Hardware Staking	Yes
Multi-Signature Staking	Yes
Mobile Staking	Yes
Nb. of Coins to Stake	>0
Masternodes	No
Coin Maturity	225 blocks (~8 hours)

4.2.4 Privacy Specifications

PART is a modern-day *cryptocurrency* and the logical evolution to Bitcoin. It doesn't just allow you to transact personto-person with anyone else; it also does it in a way that doesn't permanently share all of your financial data with the rest of the world.

PART has an adjustable level of privacy and lets you choose between three different types of transactions (public, blind, and anon), each with its own purpose, cost, and level of anonymity.

Adjustable Level of Privacy	Yes, 3 levels
Privacy Protocols	Confidential Transactions (CT) and RingCT
Bulletproofs	Enabled
Stealth Addresses	Yes
Ring Signatures	Yes
Taproot	Yes (Taproot-ready as of Particl Core 0.21+)

PART has three different types of transactions, each with its own purpose, cost, level of privacy, type of balance, and settings. All three types are available on *Particl Desktop*, where you can easily convert your coins from one kind of balance to another.

Public transactions

• Cost: Very low

• **Privacy:** Public; transacted amounts and the identity of the participants are permanently written on the blockchain and publicly displayed. Identical to Bitcoin transactions.

• Type of balance: Public

Public transactions let you make Bitcoin-like public transactions. These transactions are the most affordable ones to make and the simplest to integrate into other platforms. For this reason, they are the most widely supported type of transactions by exchanges and third-party services.

Additionally, public transactions can only be sent to public balances, which is also the only type of balance that can stake. For this reason, coins held in public balances act as "voting tickets" in Particl's *community governance system*. Visit the *Staking* in-depth guide for more information on this topic.

What can you do with public transactions?

- Send and receive public payments.
- Earn PART coins in dividend-like payments by staking.
- Pay for listing fees on the marketplace.
- Promote user markets and storefronts on the Market Browser.
- Moderate the *Particl Marketplace*.
- Use smart-contracts.

Blind transactions

- Cost: Low
- **Privacy:** Confidential; the identity of the participants is publicly displayed on the blockchain, but transacted amounts are kept anonymous.
- **Type of balance:** Blind (Private)

Blind transactions offer a significant step-up in privacy. Based on the work of the open-source Elements Project, they let you make confidential transactions that keep the value of the payment private between only you and the other party you're transacting with.

The identity of the participants (their PART address) is still publicly displayed on the blockchain, but no one else can determine how many coins were transacted.

What can you do with blind balances and transactions?

- Send and receive payments without disclosing the value transferred.
- Use confidential smart-contracts.

Anon transactions

- Cost: Moderate
- **Privacy:** Anonymous; both the transacted amounts and the identity of the participants are anonymous. No date is publicly displayed on the blockchain.
- **Type of balance:** Anon (Private)

By adding "ring signatures" to blind transactions (RingCT), you obtain anon transactions. This is the most private type of transaction on Particl and makes them completely untraceable. All of the transaction data (values transferred and addresses of the participants) is anonymously written on the blockchain, making it impossible for anyone not involved with a transaction to see its details.

Anon transactions can be made more or less anonymous by manually adjusting the number of ring signatures included in transactions. The more private a transaction is, the more expensive it is to send.

What can you do with anon balances and transactions?

- Send and receive anonymous and untraceable payments.
- Pay for goods and services on Particl Marketplace.
- Pay for listing fees on Particl Marketplace.
- Use anonymous smart-contracts.
- Enter into two-party escrow agreements without sharing any information with any third-party.
- Receive staking rewards anonymously.

Read the Funds, Coins, and Balances user guide for more information on making different types of transactions.

4.2.5 Marketplace Payments and Settlements

The PART coin is the settlement layer of *Particl Marketplace*. Although you can initiate transactions using other cryptocurrencies (i.e., Bitcoin), all marketplace payments are converted into PART *before the seller receives a bid from a buyer*.

All *Particl Marketplace* transactions are settled in PART because of the *two-party escrow system*. It works using an anonymous escrow smart-contract on the *Particl Blockchain*, and for this reason, it needs to use the blockchain's native coin.

One of the results of settling all marketplace transactions in PART is that a fair number of coins are constantly locked in escrow, away from circulation. This directly reduces the circulating PART supply on trading markets while naturally stimulating its demand. This dynamic gets stronger as more people use *Particl Marketplace*.

Note: Although paying for an order on *Particl Marketplace* is done manually using an in-app swap module, a more automatic mechanism is planned for later during the Beta phase of development.

See also:

Other sources for useful or more in-depth information:

- Particl Academy Explained Staking
- Particl Academy Guide Staking and Voting
- Particl Academy Guide Funds, Coins, and Balances

- Particl Academy Guide Obtaining PART
- Particl Wiki PART coin frequently asked questions
- Particl Website PART coin specifications
- Particl Website PART coin exchanges
- Particl Website Particl user guides
- CoinGecko Particl on CoinGecko
- CoinMarketCap Particl on CoinMarketCap

4.3 Staking Explained

"Staking" refers to the act of supporting the blockchain by validating transactions on your computer (referred to as a "staking node"). In exchange for this work, the network rewards you with its cryptocurrency coins.

Additionally, Particl's *PPoS* staking protocol allows you to securely and transparently vote on various issues and proposals using the power of blockchain technology. This process is called on-chain governance.

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 - Cold staking
 - Staking pools
 - Hardware Staking
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- Voting

4.3.1 Blockchain Consensus Mechanisms

What's a consensus mechanism?

To guarantee the integrity of the blockchain, staking nodes connected to the network process all of the transactions happening on Particl. They then compare the processed data with each other and only validate transactions when the information is identical across a majority of the other nodes.

If enough staking nodes cannot confirm the data of a transaction on the network, the transaction is collectively rejected. This mechanism is what is generally referred to as a consensus mechanism.

Staking vs. mining

Just like Bitcoin mining (proof-of-work), staking (proof-of-stake) is a consensus mechanism. They are both protocols that ensure the integrity of blockchains by validating transactions and paying out block rewards to those doing the work.

Unlike mining, staking doesn't require any special hardware (i.e., GPU) to verify transactions. Instead of providing electricity-intensive work, stakers are required to deposit a number of coins (as collateral for being good actors) on the network on which they'll earn interest in dividend-like payments.

Advantages of staking compared to mining

- Rewards stakers with auto-compounding passive income
- No expensive hardware required
- · Carbon neutral and eco-friendly protocol
- · Very little technical knowledge required
- Better accessibility and a much easier setup process
- Makes community governance accessible to any user of a network

4.3.2 Particl Proof-of-Stake (PPoS)

PPoS Quick Facts

- \bullet The current yearly staking interest rate for stakers is 8%
- The current emission rate of PART is 1.70 PART per block.
- Staking interest is paid in regular dividend-like payments.
- All fees generated by the *Particl Marketplace* are redistributed to stakers as part of the usual block rewards.
- Industry-leading staking security.
- Adjustable level of privacy when receiving rewards is available.
- No minimum number of PART coins is required to start receiving staking rewards.
- Cold staking "pools" allow you to team up with other stakers to receive more frequent rewards.
- Particl uses *PPoS* for its *community governance* to let users vote on proposals.

To support its network and verify transactions, Particl uses Particl Proof-of-Stake (*PPoS*), a unique Proof-of-Stake consensus mechanism designed by the Particl team. Unlike Bitcoin's consensus mechanism, called Proof-of-Work, *PPoS* makes the entire process of verifying transactions digital. It also eliminates the need to purchase and maintain expensive and energy-hungry hardware.

On the *Particl Marketplace*, every user is automatically a "staker" (a user running a staking node) that verifies the integrity of the network in real-time. When a staker's node finds a block and validates the transactions it contains,

it receives a staking reward. The current yearly staking interest rate on Particl ranges from a minimum of 4% to approximately 8%. This interest is calculated based on the total of coins being staked by the user.

While the Proof-of-Stake consensus mechanism isn't particularly new, Particl has been pioneering the technology during the past few years by making it much more flexible, secure, and also private. Indeed, *PPoS* is packed with several leading-edge features that let you get all the benefits of Proof-of-Stake, but without any of its typical security and convenience concessions.

Note: Did you know that Particl invented and deployed the first-ever "cold staking" protocol in 2017? Cold staking allows you to stake your funds, even if they're online, with an extreme level of security and flexibility.

4.3.3 Earn Passive Income

Staking on Particl can be a great source of passive income. Just by keeping your *Particl Desktop* client connected to the internet, you automatically earn a yearly interest rate of 4% to 8% on the total number of PART coins you hold in your public balance. In other words, the more PART coins you own, the more PART coins you earn. Simple enough, right?

Tip: If you stake enough PART coins on the network, the staking rewards they generate could be enough to pay for the entirety of your listing fees on the *Particl Marketplace*!

What's a staking reward?

A staking reward is defined as any number of PART coins received from the Particl blockchain in exchange for securing the network. These rewards are proportionally paid to stakers in exchange for their contribution to securing the network and validating transactions. This process is entirely automatic and happens in the background without you requiring to do any manual task.

How much can I earn?

On Particl, a staking reward is funded by two sources; the base reward (the number of PART generated by the blockchain at every block) and the fees paid by Particl users when interacting with the platform.

Base reward

As a general rule of thumb, you can estimate to earn 4% to 8% of the PART coins you hold in your public balance after a full year of staking without pause. However, it is impossible to know exactly how much you'd make in a year, given that the actual interest you receive depends on a few variable factors.

If you're staking 24/7, you are guaranteed to earn at least 4% more coins than you hold in your public balance per year. But that's only true if 100% of the coins in circulation are being staked by their owners. As you can imagine, this simply cannot happen.

Historically, only 35% to 60% of the PART coins in circulation are ever staked at any time, which means staking rewards get redistributed among a smaller pool of stakers. For reference, PART's emission rate is 1.70 PART per block.

This means the smaller pool of stakers receives staking rewards more often because they will find blocks more often than if every single Particl user was staking. This makes the actual yearly staking interest rate more profitable than the guaranteed minimum of 1.70 PART.

Platform fees

More people using the Particl ecosystem means more profitable staking rewards. That's because staking rewards also contain fees paid by users interacting with the Particl ecosystem. These fees come from a few different sources.

Marketplace listing fees

The *Particl Marketplace* requires a small listing fee to be paid by vendors when they list items or services for sale. That's how the marketplace, which has no central authority, prevents spam.

All listing fees are added to the same block as the payment of the fee by the vendor. That means the staker who finds this block will earn the entirety of the fee(s).

Marketplace bumping fees

The *Particl Marketplace* has a *Market Browser* that lets users browse through all the available user markets and storefronts on the network. It also enables vendors to promote their markets and storefronts by paying a "bumping fee". Doing so bumps the market or storefront at the very top of the list. This gives them greater exposure and brand recognition.

Just like listing fees, all bumping fees are added to the same block as the payment of the fee by the vendor. That means the staker who finds this block will earn the entirety of the fee(s).

PART transaction fees

When sending PART coins to someone else or into a smart-contract, a small transaction fee needs to be paid to the network. This fee is usually just a few cents, or even less, but it's counter-productive enough to fight off spam on the blockchain. This is the same type of fee charged by Bitcoin or Ethereum for making any transaction. Whoever finds a block also earns the entirety of all the transaction fees it contains.

BasicSwap (Particl DEX) fees

BasicSwap is Particl's upcoming *decentralized* exchange (DEX) that lets you swap between different cryptocurrencies without requiring a third-party. Although it is entirely decentralized, a small transaction fee similar to marketplace listing fees will be required. Just like other types of fees, it is necessary to fight off spam. Whoever finds a block also earns the entirety of all the DEX fees it contains.

Online staking calculator

While online calculators can give you estimates on how much you could earn staking PART, they do not consider the fees generated within the ecosystem. This usually makes their estimates less reliable, but it can still give you an approximative idea of the number of PART coins you could earn.

• StakingRewards.com

4.3.4 Staking Options

PPoS is a modern and flexible Proof-of-Stake consensus mechanism. Its most unique and groundbreaking feature is the ability to delegate your coin's staking power to a separate staking node that contains no coin. That's what's called "cold staking".

Not only does cold staking provide you with the most secure staking solution available anywhere, but it also unlocks a ton of ways you can stake your PART coins, each with its own benefits and considerations.

Regular staking

Pros

- Can be activated effortlessly.
- Activated by default on clients not protected by a password.
- Allows you to participate in Particl's community governance by voting on proposals.

Cons

- Your *Particl Desktop* password is stored in your computer's memory.
- You need to keep your computer online 24/7.

Arguably the easiest way to start staking is to keep your *Particl Desktop* client open. This requires you to *unlock* your wallet for staking only, which means your *Particl Desktop* client will act as a staking node and be able to verify transactions. This simple way of staking doesn't use Particl's novel ability to delegate your coin's staking power to another node, and for this reason, is a bit limited.

Regular staking requires a constant and active network connection, which means you need to keep your computer online and your *Particl Desktop* client open at all times. It also cannot be effectively implemented on external devices due to the constant network requirement, potential battery drainage, and security vulnerabilities.

This is the type of staking used by the great majority of proof-of-stake projects.

Cold staking

Pros

- Very secure staking option.
- The wallet that holds your coins doesn't need to be online at any time.
- Extremely flexible, it allows many other staking options.
- Allows you to participate in Particl's *community governance* by voting on proposals. Gives the same ability as any other staking option that relies on cold staking (hardware, mobile, etc.).

Cons

- You need to set up and maintain an external staking node and keep it online 24/7. This is one reason many people instead opt to use a VM hosted externally for this purpose.
- The setup process is more technically advanced.

Cold staking is the better, more modern way to stake proudly invented by the Particl team in 2017. It lets you delegate your coin's staking power to an external staking node without having to keep the Particl wallet that holds your coins online.

That means you can store your coins in a cold wallet, a hardware device (i.e., a Ledger Nano device), your phone, or even a just simple piece of paper with the mnemonic written on it. You'll still be able to earn staking rewards on those coins even though they are entirely offline. Indeed, cold staking grants you the maximum amount of security and adds a ton of flexibility not available with most PoS solutions.

To learn how to set up an external cold staking node, follow the instructions in the *Staking Rewards* guide available on the Particl Academy.

Note: The purpose of an external staking node is only to stake PART coins held by other wallets. It doesn't store any coins at all. For this reason, hosting an external staking node on an untrusted environment (i.e., a server provider) or

device (i.e., any computer, secure or not) is entirely safe. It will not put your PART coins at risk of being stolen.

Staking pools

Pros

- Very easy to join. Takes less than a minute.
- Offers the same level of staking security as cold staking because it entirely relies on it.
- The wallet containing your coins doesn't need to be online at any time.
- Pays more frequent staking rewards, but they are smaller in size. You earn the same number of coins (minus pool
 fees) as you would with any other staking option. The only difference is the size of the payouts and who often
 you receive them.
- Doesn't require you to deploy and maintain an external staking node.

Cons

- You need to pay a staking pool fee (a percentage of your staking revenue).
- By delegating your staking power to a pool, you also delegate your voting power. A pool operator can vote on proposals using your coins, so make sure that you know the voting intentions of any pool you join.

You can team up with other stakers by joining a staking pool and combining your staking power to earn more frequent but smaller rewards. Whenever the pool validates a block with the full staking power of all its stakers, it receives a staking reward.

All of the staking rewards collected by the pool are then proportionally redistributed to its members according to their contribution to the pool's staking power. In other words, if you stake in a staking pool and own 10% of all its staking power, then you will receive 10% of all its staking revenue, minus the pool fee.

Staking pools are safe to use as the pool operator cannot run away with any of the funds it stakes. That's because it entirely relies on cold staking. You delegate your staking power to a pool instead of an external node you control, but the security benefits are the same.

They are ideal if you hold a small number of PART coins or don't want to manage an external staking node yourself.

For a complete list of available staking pools on the Particl network, visit Particl Academy's Staking Rewards guide.

Tip: Instead of an external staking node, you can also use a staking pool to enable mobile and hardware staking.

Hardware Staking

Pros

- Most secure staking option.
- The wallet containing your coins doesn't need to be online at any time.

Cons

- You need to set up a staking node and keep it online 24/7, unless you use a staking pool instead.
- The setup process is the most complicated of all staking options on Particl.

For an even more secure staking solution, you can stake PART coins stored on a hardware device such as the Ledger Nano S or the Trezor. These hardware devices are secure *cryptocurrency* wallets that require direct physical access to authorize any transaction. They protect you against viruses, infected computers, compromised internet connections, and more.

Since *PPoS* is a highly flexible protocol, it doesn't penalize you for going "security first". Through its cold staking protocol, it lets you enable staking and earn interest in dividend-like payments on all of your PART coins stored in your hardware wallet.

To learn how to set up hardware staking, jump to the *Staking Rewards* guide right away!

Mobile staking

Pros

- Very secure staking option.
- The wallet containing your coins doesn't need to be online at any time.
- Relatively simple setup process.

Cons

• You need to set up a staking node and keep it online 24/7, unless you use a staking pool instead.

As its name implies, mobile staking lets you earn a staking interest on the PART coins you hold on your phone. This functionality uses cold staking to delegate your coin's staking power to another node.

Because your phone isn't doing the actual staking work (that's the role of the external staking node), it doesn't lead to battery drainage issues and doesn't require you to keep your phone powered on. It also won't bust your mobile data as it uses no extra network resources.

It is a convenient and user-friendly staking solution that lets you carry your coins wherever you go and still earn staking interest on them.

4.3.5 Privacy

By default, Particl Proof-of-Stake distributes its staking rewards using public transactions. This process is completely transparent and auditable. This is a huge boost in trust and security for the network as any potential malfunction or coin-generating exploit could be instantly detected right at the source.

However, it also means anyone can trace staking rewards and look right into your wallet. Not something you would want to happen with your bank account, that's for sure.

That's why Particl allows you to control your level of staking privacy using Partyman; Particl's cold staking application. To do so, you need to indicate to the network that you'd like to receive your staking rewards in another type of balance other than your public balance. Check out the *staking guide* to see how to do it.

4.3.6 Voting

PPoS is at the core of Particl's decentralized governance. You can vote on various community proposals using your staking power as voting power. Register your voting preferences during a proposal's voting period; every time you'll stake a block during that period, you'll cast one vote.

To learn more about Particl's community governance model, head over to the Community Governance in-depth guide.

See also:

Other sources for useful or more in-depth information:

- Particl Academy Guide Enable Staking.
- · Particl Wiki PART coin learn staking
- Particl Wiki PART coin tutorials
- Particl Wiki Staking pools

4.4 Two-Party Escrow Explained

When buying from or selling to strangers online, you need to be confident that the other party will keep their end of the agreement and not scam you. That's why contract security and enforcement are essential when trading goods and services on any marketplace.

To guarantee your security in any given marketplace transaction, *Particl Marketplace* requires you to use its unique and no-cost two-party escrow system.

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4.4.1 Typical Resolution Centers

When two parties (the buyer and the seller) transact on a marketplace, a third-party (the escrow agent) usually holds the payment and releases it when the transaction is completed (i.e., the purchased item is delivered). That role is generally assumed by the marketplace itself (i.e., Amazon), a payment processor (i.e., Paypal, Visa), or third-party escrow services (i.e., a bank or a financial institution).

This allows any potential dispute or issue to be safely settled, but it also has many downsides that both parties need to be aware of.

High escrow fee

No service is ever provided for free. Because there are massive underlying costs to running escrow services, they are provided at a sizeable cost. That's because escrow service providers need to hire staff, deploy secure systems, define and enforce policies, pay for never-ending legal fees, assume fraud risk, etc.

In some cases, marketplaces will clearly indicate the cost of securing a transaction with escrow or resolution services. In other cases, this cost is not independently displayed but instead included in the total transaction fee.

Biased resolutions

When an issue arises, it is usually settled following a very rigid set of policies rather than being dealt with on a caseby-case basis. This allows a greater number of issues to be resolved quickly and efficiently, but it also leads to biased resolutions.

This is nothing like a conspiracy but rather a logical business strategy. Marketplaces and payment processors will typically side with buyers in the great majority of cases. That's because, for two-sided marketplaces, the sellers tend to follow where the buyers shop online rather than buyers following where vendors are selling. That's why marketplaces prioritize happy buyers as opposed to happy vendors.

Online merchants are well aware of this bias and reduce their exposure to this risk through their prices.

Fraud and abuse

Knowing that issue resolutions can be biased, online scammers have perfected the art of abusing escrow policies and tricking escrow agents. Even on very popular platforms like eBay or Paypal, "escrow scams" are rampant, leading to thousands of dollars being stolen every day around the world.

One of the best examples of an escrow scam is the infamous but prominent "return scam" on eBay. Let's say you put up an item worth \$1,000 for sale online. The scammer will buy it from you, pay for the item, and wait to receive it. Once received, he will claim it isn't working and request a refund. A refund requires them to ship back the item in the same package, which is what they do. But instead of putting your item back into the box, they'll put scraps worth nothing but weighing the same as the initial item. This is often enough to trick the automated process used by eBay, and through this process, they can get refunded their payment and keep the item.

Intrusive data requirements

To resolve a dispute, escrow services need to know as much as they can about you and the party you're transacting with. Of course, all of this information is stored on one or more central databases for further reference and monetization.

This is an obvious case of storing too much data, leading to countless data breaches and leaks every year. The more data a company collects about its users, the bigger the target it becomes for hackers and abusers.

No privacy at all

When using an escrow service, you and the other party you're transacting with both need to trust the escrow agent in full. That's because you are granting that party full access to a lot of sensitive information about you and the right to hold money on your behalf.

The amount of data provided to escrow agents gives them complete oversight of all the personal, professional, and financial data generated by your use of the platform.

4.4.2 Particl's Unique Solution

Particl adopts a radically different escrow model that fixes all of these issues. It is called a "two-party escrow" system because it only involves two parties; the buyer and the seller.

Instead of requiring a third-party to hold the payment on behalf of two transacting parties, both participants are required to provide collateral by making an equal security deposit into a smart-contract. This security deposit is automatically refunded to both parties, without any fee, once both parties mark a transaction is completed.

If any dispute or issue arises, both parties need to mutually agree on a satisfying resolution for both of them to mark the transaction as complete. Because the two parties have a security deposit locked into the escrow smart-contract, they are naturally forced to collaborate and reach a reasonable resolution for both.

Benefits

- · It costs no additional fee.
- Keeps all of your data secure and private.
- Available at any time and from anywhere.
- Infinitely scalable; can support as many transactions as required.
- No moderator, arbitror, or third-party required.

Things to keep in mind

- Each transaction in escrow requires an equal security deposit from both transacting parties as collateral.
- Security deposits are equal to the full cost of the purchased item + shipping.
- The PART coin's price can change based on supply and demand, meaning the fiat (i.e., USD, EUR, etc) value of security deposits may fluctuate while in escrow.

No fee, 100% free to use

Particl's two-party escrow system is entirely free to use. There is no additional cost or percentage taken off transactions other than the regular cryptocurrency transaction fee, which is usually just a few cents or sometimes even less than that.

You're in control

You and the other party you're transacting with are in total control of the process. There is no third-party involved in the transaction who can force a resolution. Biased resolution policies are simply not a thing with two-party escrows.

Your data is safe

Particl's two-party escrow system doesn't generate any extra data. If no data is generated first, it can't be collected by anyone else. The system works autonomously using the power of confidential smart-contracts and blockchain technology.

Total privacy

Since two-party escrows don't require the intervention of a third-party, personal information (i.e., shipping details) is only made available to the other person you're transacting with. Thus, nobody else in the world can know anything about any Particl escrow transaction. It's the digital equivalent of making an in-person cash transaction.

4.4.3 Step-by-Step Process



Using Particl's two-party escrow system is a step-by-step process that requires a few manual inputs from you. The complete flow of a single transaction, from the moment an order is placed to when the transaction is completed, is as follows.

- 1. ORDER REQUEST: The buyer places an order request and waits for the seller to accept it.
- 2. *ACCEPTED*: The seller accepts the bid and now waits for the buyer to send their payment and security deposit into the escrow smart-contract.
- 3. *ESCROW*: The buyer sends their payment and security deposit into the escrow smart-contract and now waits for the seller to send their security deposit as well.
- 4. *PACKAGING*: The seller has made their security deposit into the escrow smart-contract and is now packaging the order to ship it.
- 5. *SHIPPING*: The seller has shipped the item as shipped and is now waiting for the buyer to receive and confirm the delivery.
- 6. *COMPLETE*: The item has been received by the buyer. The item has been inspected, and no issue was found. Therefore, the buyer has marked the transaction as complete. There are no more required actions in this transaction. Both participants have received their security deposits back, and the seller has received the full payment for the purchased item.

4.4.4 Understanding Game Theory

To understand why Particl's two-party escrow system is effective, it's essential to understand the mathematical principles on which it relies. Indeed, Particl's escrow is based on "game theory".

By definition, game theory simply refers to the study of mathematical models of strategic interaction among rational decision-makers. In other words, how can rational decision-making be rewarded and irrational/dishonest behavior be punished simultaneously?

To accomplish that, Particl leverages the Mutually Assured Destruction (MAD) game theory and gives it a financial twist. "MAD" is a military doctrine "based on the theory of deterrence, which stipulates that the threat of using strong weapons against the enemy prevents the enemy's use of those same weapons. The strategy is a form of Nash equilibrium in which, once armed, neither side has any incentive to initiate a conflict or to disarm" (Wikipedia).

Simply put, when two countries are armed with, for example, nuclear weapons, there is no incentive for any of them to attack each other as that would inevitably result in an equally destructive retaliation. This would, ultimately, leave both countries in rumbles and make no winner.

Blockchain and Game Theory

Particl takes that same military doctrine and substitutes weapons of war for financial collaterals. When you buy or sell something on the Particl Marketplace, you and the other party you're transacting with are required to lock an equal security deposit paid in PART coins in a smart-contract.

Suppose one of the two parties tries to scam the other or doesn't act in complete honesty. In that case, the "victim" can retaliate by not authorizing the bad actor's security deposit release. This makes even just attempting to scam someone a risky business as you might lose your security deposit. In other words, a scammer cannot successfully attack another marketplace user without losing their own financial collateral.

And so, just like the military superpowers of this world, Particl uses the proven mathematical model behind the MAD game theory to enforce honesty and accountability among all of its participants.

Smart-contracts and automation

A smart-contract is a particular type of blockchain script. It can accomplish tasks and execute transactions autonomously following an immutable set of rules. That's how Particl's two-party escrow system is made autonomous and the reason no third-party is involved.

The two-party escrow smart-contract is programmed with a set of rules, which is pre-defined by the mathematical model of the MAD game theory. Whether a security deposit or payment is released depends on whether all the criteria for its release are met, which is that both parties mark the transaction as complete.

See also:

Other sources for useful or more in-depth information:

- Particl Wiki MAD Escrow
- Particl News Blog Particl Explained—Two-Party Escrow System

4.5 Marketplace Moderation Explained

Like any online marketplace or platform, there needs to be a way for its content to be moderated. Sure, Particl is unstoppable, uncensorable, and it can't ban users. But leaving the platform without any sort of moderation mechanism would create an unspeakable number of problems.

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Have a look at the outcomes before starting to dig into the deep details.

Benefits

- Moderation system based on direct democracy.
- Provably fair and accurate governance.
- No pre-defined ban on specific products and services.
- Entirely distributed, doesn't require any user with special permissions.

Considerations

- Because there is no way to enforce any pre-defined bans on a distributed network, you may encounter products you do not like from time to time. It is important that you flag these products if you believe they shouldn't be on the marketplace.
- For your coins to count as votes, they need to be held in your *Public* balance. Coins held in your *Anon* balance don't work with the voting mechanism.

Since Particl is a distributed marketplace, there is no one in possession of any special account that would give them more power and privileges than others. That means no support staff, no moderator, no admin, no nothing there to keep spam and undesirable content away. For this reason, the moderation of the marketplace's content needs to be done differently.

Instead of giving moderating powers to a few groups of "trusted" individuals, it gives it back to everyone. Indeed, Particl's moderation system is heavily inspired by the concept of the "wisdom of the crowd", which stipulates that, typically, decisions taken collectively by large groups of people are more informed than if taken by a limited group of individuals.

That, of course, is probably not applicable to all spheres of life. Still, when it comes to moderating a global and distributed marketplace, it's an efficient way to reach a fair and globally agreeable consensus and take personal or geographical biases out of the equation. *Particl Marketplace* truly is the first global marketplace environment.

4.5.1 How Does it Work?

Ultimately, Particl's moderation system is very similar to Reddit's popular upvote and downvote system. On Reddit, each thread and post can be upvoted or downvoted by the community. Any Reddit user can cast a vote (an upvote or a downvote) that adds or substracts a "point". Once a post reaches a negative threshold of points, meaning that a much greater number of people have downvoted the post compared to the number of people who've upvoted it, it gets automatically hidden and placed at the bottom of the list.

On Particl, listings are moderated the same way threads and posts are on Reddit. The big difference is that instead of counting votes on a "one user equals one point basis", it does it on a "one coin equals one point basis". When a listing reaches a negative threshold of points, it gets delisted and taken off the marketplace completely.

Flagging

If you find a listing that you think shouldn't be on the marketplace, you can flag it for removal. This immediately takes it off your instance of the marketplace and moves it to the *Reported Listings* page where other people will now be able to upvote or downvote it. You won't see that listing on the marketplace anymore, but others still do and can purchase it up until the point when that listing accumulates enough downvotes.

Upvoting and downvoting

If you navigate to the *Reported Listings* page, you'll find all the listings that other people have flagged. You'll also find any listing you've previously flagged that has not yet received enough downvotes to be completely taken off the marketplace.

It is also where you can cast upvotes and downvotes for listings that other people have flagged. When you cast a vote, it adds or subtracts a number of points equal to the number of PART coins you hold in your public balance.

When a reported listing reaches a number of points lower than the minimum allowed by the network, it gets completely taken off Particl for everyone, even for those who've never seen the listing in the first place. This delisting process also permanently deletes a listing from the *Reported Listings* page.

Adjustable thresholds

The delisting threshold is the agreed-upon point requirement for a listing to remain on the marketplace. When a listing accumulates more downvotes than the agreed-upon threshold, it gets deleted from the marketplace for everyone.

This threshold is adjustable and collectively agreed upon by the community. It's also possible to manually change the delisting threshold of your own client by modifying the correct *Particl Desktop* configuration file on your computer. This doesn't affect the threshold of other people, but it can allow you to make quick changes, if needed, without having to wait for a new *Particl Desktop* client update to change the threshold.

The delisting threshold is currently set at -9,000 PART, which means a listing has to get a moderation score (upvote/downvote ratio) of -9,000 PART to be taken off the Particl network.

4.5.2 Benefits

Provably fair

Particl's moderation system is powered by blockchain technology which makes it provably fair. It cannot be tricked and creates an equal level playing field for everyone. The system makes it impossible for anyone to fraudulently inflate their voting power. It is pure, unadulterated direct democracy in action.

No pre-defined restrictions

Particl is a completely distributed network. For this reason, it cannot effectively enforce any restriction on products or services being offered, unlocking the full potential of the global *free market*. The marketplace's moderation policies are solely based on the votes of its users.

Free to use

Typically, online marketplaces include the costs of moderating their platform into the sales commission paid by sellers. That's because moderating a marketplace is costly and requires quite a bit of logistics. Staff needs to be hired, policies need to be drafted along with a legal team, etc.

Particl's moderation system doesn't need to deal with that at all. It is entirely distributed and autonomous. And although it requires coins to flag listings and vote on them, it doesn't cost anything at all. Not even the usual *cryptocurrency* transaction fee!

4.5.3 Coins as voting tickets?

To understand why Particl uses coins to count votes and not the number of users that vote, you have to remember that it never knows anything about any of its users in the first place.

To game the moderation system, it would be very easy to create an infinite number of Particl identities and cast multiple upvotes or downvotes to certain listings. No one would ever know about it, and there'd be no way for Particl to detect that dishonest behavior.

PART coins, on the other hand, are the perfect voting tickets. They can't be faked, created out of thin air, or be duplicated. There is a fixed number of them in circulation, and they grant everyone an equal opportunity to either increase or decrease their total voting power. The more PART coins you hold, the greater your voting power becomes.

This system also prevents outside influence from outside parties by ensuring that only those with real stakes in the network can have a say over its moderation policies.

Game-Theory

Using coins as voting tickets also involves a bit of game theory which solidifies the system. By definition, game theory simply refers to the study of mathematical models of strategic interaction among rational decision-makers. In the case of a distributed and open moderation system, it is how people can be forced into behaving rationally.

To understand why that is, we have to keep in mind that a PART coin is a unit of digital currency with a value that fluctuates depending on many factors. This includes the amount of activity on the marketplace, but also its user growth, general appeal to other people, financial market speculation, etc.

Generally speaking, moderating the marketplace irrationally (i.e., sellers dishonestly flagging each other's listings or leaving immoral listings on it) directly leads to fewer people using the marketplace. And when fewer people use the marketplace, the value of the PART coin itself can have a hard time going up, just like the size of the *dividend-like staking rewards* it pays as well.

For this reason, Particl users are directly and financially incentivized to keep the platform as clean and fairly moderated as possible.

4.5.4 Keep in Mind

- Because there is no way to enforce any pre-defined bans on a distributed network, you may encounter listings that you don't like from time to time. It is important that you flag these products if you believe they shouldn't be on the marketplace.
- For your coins to count as votes, they need to be held in your *Public* balance. Coins held in your Anon balance won't count towards moderation votes.

See also:

Other sources for useful or more in-depth information:

- Particl Wiki Community governance
- Particl News Blog Particl Explained Decentralized Marketplace Moderation
- Particl News Blog Particl Community Crowdfunding System

4.6 Security and Privacy Explained

Digital security and privacy is a fundamental human right. Unfortuantely, over the last few years, the various internet service providers you use every day have amassed a downright scary amount of personal information about you. It is even said that tech giants know more about you than you do yourself.

See also:

• Particl Academy - Intro summary and overview Stand For Liberty

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To guarantee the security of your personal information and your privacy, Particl adopts a vastly different approach than other internet service providers—it gives you full ownership over your own data.

Instead of forcing you to agree to endless and incomprehensible terms and conditions aimed at collecting your personal information, Particl simply doesn't generate any identifiable data about you at all.

If no data exists in the first place, then it can't be collected by anyone. And if it can't be collected, then it can't be leaked or misused. Very simply, Particl doesn't ask for your trust; it just never knows anything about you ever.

This groundbreaking level of online privacy is made possible thanks to Particl's distributed nature and the vast array of security protocols implemented on its network.

4.6.1 No Central Database

All issues related to online data have something in common—personal information was stored and obtained from some company's database either willingly (data sharing policies) or unwillingly (data breaches). But that is simply impossible on Particl because it isn't built like your typical online marketplace.

It is an entirely autonomous platform that runs on *peer-to-peer* (P2P) and blockchain technologies. It's not a company, it's not running on servers, it doesn't have any central database, and it doesn't require any middleman such as a payment processor to function.

In other words, none of your personal information is ever stored on any database. As a result, there is not a single party, other than buyers and sellers you're doing business with, that can know anything about you and use that information for any reason.

4.6.2 Account Information

To use online marketplaces, you generally need accounts. That's because marketplaces want to know you as much as possible so they can personalize your experience on their platform, get more money out of you, and then monetize your data externally.

But having an account still has its upsides. It allows the marketplace to remember useful information such as your order history, shipping addresses, payment details, market preferences, and more. It can make your life much easier.

This is why Particl stores your account information locally on your computer and never shares any of its data with anyone else. In addition, any personal information it contains is encrypted via military-grade encryption so that no one else but you can access it.

4.6.3 History and Shopping Habits

Just like your account information, traditional marketplaces track your browsing history and shopping habits to know as much as they can about you. They even openly share it with partners who, in turn, share their users' information back.

Marketplaces and other online services typically use that kind of data to find out what you like, what product they think you would buy, how to optimize their services, etc.

It certainly can be useful, but it isn't all fine and dandy. The obsession marketplaces have with your browsing history and shopping habits not only constantly leads to data breaches, but also intimate and straight-up uncomfortable situations. Remember, online service providers tend to know more about you and the ones you love than you do yourself.

Particl hands you back your online privacy by making it impossible for anyone in the world to know your browsing history and shopping habits because no identifiable data is being generated about you at all.

4.6.4 Transaction Data

Particl isn't built on typical internet and financial technologies. It's instead built on blockchain technology and requires payments to be made with *cryptocurrencies*. And while they enable cheap and near-instant payments on a global scale, they do poorly from an online privacy perspective.

In fact, public blockchains permanently store all the information of the transactions that happen on their network in a public ledger. It lets anyone in the world easily access and collect the information of any transaction ever. There's a very strong argument to be made whether they are just as bad as private databases, or even worse.

That's not the case with Particl. Instead of using a public blockchain, it uses a private blockchain that lets you keep your data confidential and anonymous.

When using the marketplace, none of your information is publicly displayed. Sure, it still ends up on the blockchain, but what others see when looking at it can only be described as gibberish.

It's still possible to make public transactions on Particl, but not when using the marketplace. To learn more about the different types of balances and transactions on Particl, head over to the *Currency (PART) Explained* in-depth guide.

4.6.5 Network Identity

Another type of data that can be pretty damaging when it gets stolen is your network identity (IP address). Your IP address is your own unique internet identity which is shared across all your internet-connected devices. If enough data can be linked to your IP address, your identity is revealed, and it becomes possible to track all of your online activity.

Like any type of data, it can make your online experience more convenient. But it can also make your life hell if it ends up in the wrong hands.

On Particl, no one can associate an IP address to any other Particl-related data. And while your IP address is broadcast to other peers on the network, it doesn't reveal anything meaningful about you. The only thing it really tells is that someone in the world owns this IP address and uses Particl.

If you want to take your online privacy a step further, you can route your connection through the *Tor* network (installation guide *Install Tor* (*Network Privacy*)), a networking protocol used to spoof internet connections. This will broadcast a fake IP address to the network and keep your real one confidential.

4.6.6 Marketplace-Related Privacy

Particl Marketplace takes your security and privacy very seriously. It is built from the ground up in such a way that never creates any useful data about what you. When no data exists, it can't be collected, analyzed, and shared with anyone else.

Marketplace content

When you upload content like images online, it often contains sensitive data about you like where the picture was taken (geo-location) or what device was used to take the picture. This is a big privacy issue that can lead you to, for example, to reveal the GPS location of your home unwillingly.

To protect you from this, Particl encrypts and strips every image of its metadata before broadcasting it to the rest of the network. This makes it impossible for anyone to collect any useful information about user-uploaded images.

The two-party escrow system

Usually, when a transaction goes wrong and needs to be resolved by a third-party, marketplaces and payment processors act as the deciding factor by issuing a resolution. They have the final say in who should get the money when a conflict arises. They can also ban users, force refunds, etc.

This puts the security of your data and your online privacy at significant risk. While a third-party can protect you from scammers and help you out when you need it, it also gains full access to all of your information.

To offer the same kind of protection without impeding your online privacy, Particl uses a two-party escrow system that uses autonomous blockchain smart-contracts. No party, other than the one you're transacting with, can gain access to or interact with it. Instead of human mediation, security deposits are made by both transacting parties and are only refunded once the two of them agree the transaction has been completed satisfactorily.

This results in an escrow process that is entirely private and very secure. None of your personal information or data can be extracted by any third-party, and all information is kept confidential on the blockchain. There is no digital footprint generated.

Secure messaging

On traditional marketplaces, all your communications with buyers and sellers are stored, monitored, and analyzed by the marketplace itself. This, of course, exposes a great deal of information about you and your business. It opens the door wide open for anyone, authorized or not, to collect or steal a lot of information about you and use it for their own benefit.

Particl makes sure to put that issue to rest by relying on a completely *decentralized* messaging network named *SecureMessaging (SMSG)*. It encrypts, end-to-end, all the messages you send to other users and automatically delivers them to the intended recipient. Only the people you're sending a message to can open and read it. It cannot be intercepted and decrypted by anyone else.

4.6.7 Achieve Maximum Privacy

While Particl provides you, by default, with an unmatched level of data security and online privacy, there are still some tricks you can do to improve your privacy even more.

Make private transactions

Note: All payments made on the marketplace are private by default and cannot be made using public balances.

When you're sending a PART transaction to someone else, you can choose its level of privacy. By default, Particl uses *Public* transactions, which means they are fully transparent and publicly auditable.

To improve your privacy, try sending *Anon* transactions instead. Anon transactions hide the amounts being transacted as well as the identity of both participants. This keeps your personal information and that of the people you're transacting with entirely confidential.

Enable Tor

Another easy way to improve your online privacy when using Particl is to route the *Particl Desktop* client through the *Tor* network, a networking protocol used to spoof internet connections. Using *Tor* protects your online identity by making hiding your IP address from the rest of the network.

To learn how to enable *Tor* on your *Particl Desktop* client, head over to the *Install Tor* (*Network Privacy*) installation guide.

Use PART addresses only once

Note: Every time you receive a payment on a Particl address, your *Particl Desktop* client will automatically generate a new address for you.

When using any *cryptocurrency*, it's widely recommended not to re-use the same address over and over. Ideally, *cryptocurrency* addresses should only be used once, when possible, and a new address should be generated every time you need to receive a payment.

The reason behind this is pretty simple; when someone gets to know an address of yours, they can look it up on a blockchain explorer and track all the transactions you've ever sent or received from that address. Nobody wants that!

When you generate a new address, there is no previous transaction that can be analyzed by anyone. This keeps your personal information private and ensures no prying eye can dig into your financial records.

Use multiple wallets

You can even go a step further and generate entirely independent wallets instead of just creating new addresses. In fact, even when creating new addresses, it's still possible to match "transaction outputs" together and associate clusters of transactions with you.

To understand why, imagine you receive two payments on the same wallet but using two different addresses. The first payment, worth \$100, is received with Address A. The second payment, worth \$50, is received with Address B. That gives you \$150 in total stored in two different addresses. In this example, both Address A and Address B are brand new addresses that have never received payments before.

Now let's say you want to make a payment of \$125 to someone you don't know. None of your two addresses contain enough coins to complete the transaction on their own. To make the payment, the blockchain will automatically take a few coins from Address A and a few coins from Address B and combine them together so that it can send \$125 worth of PART out of your wallet.

When that happens, the two addresses are part of the same transaction and are effectively linked together. From that point onward, anyone looking at Address A would be able to tell that it is linked with Address B.

To protect from this, you can create multiple wallets right from *Particl Desktop*, each with its own purpose. Because each wallet is independent, none of the addresses can be used together and linked. Each wallet can also be encrypted independently with different passwords, providing more security to your funds.

This function dramatically improves your online privacy by taking the human mistake factor out of the equation and making it impossible to unwillingly "taint" transactions with addresses you'd rather keep private.

Use multiple user profiles

When you list products and services on Particl, they are associated with a Particl address of yours. This is what is referred to as your seller profile. When listing multiple items, they all get published under the same seller profile and, for this reason, can all be linked to the same vendor. Of course, this doesn't tell anyone anything about you, but it lets people know that the same unknown person is selling some items on the marketplace.

While this is good for brand recognition and building yourself a reputation, this may not always be what you want. When that's the case, you can create an infinite number of seller profiles and use them to publish listings.

To do so, simply create a new market or storefront, pick what seller profile you want to use to "generate" the market, and start listing products.

See also:

Other sources for useful or more in-depth information:

• Particl Wiki - Privacy & Security tutorials

4.7 Community Governance Explained

Particl has a *decentralized* community governance mechanism that gives you a voice in the ecosystem's most critical decisions. The model uses the Particl Proof-of-Stake (*PPoS*) staking protocol to let you cast votes on community proposals.

And if you need bootstrapping capital to bring to life a project of yours, there's also a *decentralized* treasury fund at your disposition. With the community's approval, you can claim funds from it so that you can focus entirely on your project rather than on the need to raise the startup capital it requires.

Particl's *decentralized* community governance model puts you in control and gives you the tools you need to make anything happen. This in-depth guide will explain everything you need to know to master it and start contributing to the Particl ecosystem right away!

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4.7.1 Decentralized Governance

In the cryptocurrency industry, *decentralized* governance refers to the ability of a community to publish, debate, and vote on various proposals and issues using distributed tools. It seeks to balance control over a particular project from a small group of individuals to a broader community. Depending on the project being governed, the level of decentralization can vary, giving more or less power to its community.

Ideally, *decentralized* governance mechanisms strive to use properly distributed tools to run voting rounds in a provably fair manner. This eliminates third-party risks associated with voting manipulation and unfair influence over the outcome of a vote.

Particl's model in a nutshell

The Particl project is all about decentralization, security, privacy, and personal freedom. That's why its governance follows a decentralized, fair, and genuinely democratic model.

Indeed, anyone from the Particl community can publish proposals on the CCS platform. Each proposal has to first go through a discussion phase, after which it gets moved to a voting phase. That's when the rest of the community can vote to either approve or reject the proposal using their staking power.

To support community initiatives and provide the initial capital they require, Particl has a *decentralized* treasury fund that is automatically funded by the blockchain. Proposals can request funds from it to help bootstrap initiatives as long as they directly benefit the Particl ecosystem.

4.7.2 Community Proposals

When it comes to Particl's *decentralized* governance model, proposals refer to any proposed initiative, project, protocol change, or request of funds from any individual or group.

For proposals to be considered "valid" within Particl's model, they are required to benefit and bring value to the ecosystem directly. There is no other hard requirement other than to follow the general CCS rules and guidelines.

CCS Platform

Proposals are published on the Community Crowdfunding System (CCS) platform. Forked from Firo's adaptation of Monero's CCS system, this platform is hosted on Github and tasked with provably tracking the lifecycle of a proposal. This includes any discussion or modification related to the proposal.

When published, a proposal initially goes through a discussion phase (*Ideas*) where others can add comments to what's being proposed. During that phase, the proposal's owner(s) can modify its proposition based on the feedback received. Any change made at this stage is transparent and clearly displayed on the proposal's page.

Then, the proposal moves to the *Funding Required* phase to collect the capital it needs for the proposed initiative to get started. A proposal can either request donations from the community or request funds from the *decentralized* treasury.

Once a proposal is fully funded, it moves to the *Work in Progress* phase, where its owner(s) will get to work. Funds are disbursed to the appropriate party based on pre-defined milestones in the proposal. Milestone-based fund payouts ensure that funds are only used for their promised purpose.

Finally, a proposal is moved to the *Completed Tasks* phase after every milestone has been completed and the project delivered in full.

Decentralized Treasury

Proposal owners can request funds from Particl's *decentralized* treasury fund to get the startup capital required to kickstart the proposed initiative. For a claim to be accepted and for funds to be attributed (on a milestone basis) to the owner, it needs to be approved by the community through a community vote.

Particl's *decentralized* treasury fund is powered by Particl's staking protocol and self-funded using a portion of the network's block rewards. Every time a block is found and validated by a staker, 50% of the staking rewards it contains is automatically deposited into the treasury fund by the protocol.

No coin from the treasury fund can be used or transacted without the community's consensus, which is determined by an on-chain vote.

4.7.3 On-Chain Voting

Voting rounds on Particl are conducted in a *decentralized* and provably fair manner. Only active stakers, referred to as "stakeholders" in the specific context of an on-chain vote, can cast votes on proposals. This ensures only individuals with a vested interest in the project can govern its most important decisions.

The process of voting and counting votes leverages the Particl Proof-of-Stake (*PPoS*) staking protocol, and every round's results are publicly inscribed on the blockchain permanently. This provides the maximum level of transparency and security possible, making it impossible to modify past results or misreport voting outcomes.

To determine each individual's voting power, the voting preference of a staker is only counted when they find a block. Then, at the end of a voting round, all the blocks within the voting round's timeframe are scanned, and those that have votes are counted towards the final tally. In other words, the more a single staker finds blocks, the more voting power they hold.

Voting rules and parameters depend on the type of proposals being voted on.

Non-Protocol Consensus-Changing Proposals

Quorum	20% of all the blocks during a voting period
Approval Rate	>= 60% in favor
Duration	5,040 blocks minimum

The first type of proposal, non-protocol consensus-changing proposals, does not require significant changes to the protocol. Typically, they would be proposals requesting funds from the treasury fund to kickstart a specific project, for example.

For a non-protocol consensus vote to be considered "valid", its voting period must be a minimum of 5,040 blocks (roughly one week). Within that period, 20% of the blocks staked need to vote for one of the available voting options. That means the quorum has to be at least 20%.

Finally, to be considered as "approved" by the community, it needs to reach an approval rate of at least 60%, meaning at least 60% of all the votes cast for the proposal approve of the proposed idea.

Protocol Consensus Changing Proposals

Quorum	20% of all the blocks during a voting period
Approval Rate	>= 75% in favor
Duration	10,080 blocks minimum

The other type of proposals, protocol consensus changing proposals, are typically more critical in scope and can significantly impact the ecosystem. They are any proposal that requires a specific change in the protocol, such as, for example, modifying the inflation rate of the blockchain, introducing a new privacy technology, etc.

Just like non-protocol consensus-changing proposals, their quorum requirement stands at 20%. But because of their increased level of importance and ramifications, they require a higher level of approval from the community. In fact, the required approval rate has to be at least 75%. Finally, the duration of any protocol consensus vote has to be a minimum of 10,080 blocks (roughly two weeks) to give ample time to anyone to be able to cast their vote.

See also:

Other sources for useful or more in-depth information:

- Particl Academy Enable Staking
- Particl Academy Staking Explained
- Particl Wiki How to Vote on Proposals
- Particl Marketplace Explained
- PART Coin Explained
- Staking Explained
- Two-Party Escrow Explained
- Marketplace Moderation Explained
- Security and Privacy Explained
- Community Governance Explained

CHAPTER

FIVE

HELP AND ASSISTANCE

Are you having an issue not covered in this section? Your invaluable insights will make the Particl Academy more complete.

5.1 Frequently Asked Questions

Note: The Particl Academy is up-to-date with Particl's latest version, Particl Desktop 3.0.

Got any questions not answered here? Then **let us know** about it so that we can help you out and update the Particl Academy!

5.1.1 Particl Coin Questions

Coin Staking FAQ

Why are some of my coins aren't staking after receiving my last staking reward?

When staking, your coins are separated into multiple outputs. Each output stakes separately with the hopes of finding and verifying a block.

When one of your outputs stakes a block, or when you receive a transaction, the output is temporarily unavailable until it can be moved or stake blocks again. This process is referred to as "maturing" and lasts for 225 blocks (~8 hours).

Once your output is mature once again, you'll be able to transact the coins it contains, and it'll be able to stake blocks once again.

5.1.2 Particl Marketplace Questions

General Marketplace FAQ

How can I create a new market identity?

The ability to create a new market identity is not enabled by default. To enable the option, go to *Market Settings > Advanced Features* and check the *Enable multiple identities for the current profile* box.

Then, click on the downward-facing arrow located above the *Overview* button in the menu on the left. This will display a new option. Simply click on *Click to create*... button to create a new market identity.

How can I earn PART by staking my coins?

This depends on many factors such as the total number of PART coins being staked by other users, the number of transactions on the marketplace, the number of transactions on the blockchain, the number of times people promote their market or storefront, etc.

To know everything about staking, head over to the Staking Explained in-depth guide.

Why can't I see any listing on the marketplace?

To see listings on the marketplace, your *Particl Desktop* client needs to be fully synced with the *Particl Blockchain* AND the *SMSG network*. This process can take several minutes, especially if you have a slow internet connection, so don't worry if you're still not seeing anything after a while. Just leave your *Particl Desktop* client open, and it will eventually catch up. Note that the *SMSG network* can take several more minutes to sync than the blockchain.

Once your client is fully synced, it will be much faster to sync whenever you open it again. The initial syncing is the longest process and doesn't need to be repeated every time.

I think I've found a bug. Where can I report it?

If you think you've found a bug or issue, click on the *bug* icon at the bottom left corner of your *Particl Desktop* client and create a new Github report by clicking on the green *New issue* button.

Thanks for your help!

How can I get more technical support?

First, make sure that your question or issue isn't already addressed somewhere in the Particl Academy. That's the easiest way to fix most problems. Have you tried the search function?

If you can't find the answer you're looking for in there, then head over to the Get Support section to get more help!

Customer's Frequently Asked Questions

How do I open the marketplace in order to see listings?

- 1. Be sure to have the latest version of Particl Desktop installed. The Quickstart guide may help you greatly.
- 2. After the initial startup, have some patience to let the *blockchain* sync in the background. On a fibre connection this takes up to 15 minutes. The following startups will sync-up way faster.
- 3. Click on *MARKET* -> *BROWSE* and wait until numbers start to count up beside the *REFRESH* button. As soon as the first numbers appear click on *REFRESH*. Listings appear.

Be sure you don't see any warnings in the top right "status" bar. If you still don't see any listings feel free to reach out on the community support channels. *Get Support*

What does each order status mean?

- ORDER REQUEST: You have requested an order on an item and are now waiting for the vendor to accept it.
- ACCEPTED: The vendor has accepted your order and is now waiting for you to send the payment and your security deposit in escrow.
- ESCROW: You have locked your funds in escrow and are now waiting for the vendor to lock their security deposit as well.
- PACKAGING: The vendor is now packaging your order and getting it ready to ship.
- SHIPPING: The vendor has shipped your item and is now waiting for you to receive and confirm the delivery.
- *COMPLETE*: You have received your order and have confirmed the order as "complete". There are no more required actions in this transaction, and you've received your security deposit back.

Why isn't the seller updating my order after I placed a bid?

If your *Particl Desktop* is protected by a password (encrypted), **you need to unlock it with your password** to receive order updates. If you keep your client locked, you won't receive the notifications and won't be able to progress to the next step.

If your order is still not updated after unlocking your client, that's because the seller hasn't done it yet. Wait for the vendor to update the order, or try leaving them a message in the *Comments and Reviews* section of the listing page!

Why does the marketplace require me to pay twice the value of the item I want to buy?

That's because you need to fund the escrow contract with a security deposit equal to the total value of your order. This deposit will be refunded to you at no fee at all once the transaction is fully completed.

For example, if you're buying an item worth \$100 (including shipping), then you'll be required to deposit a total of \$200 into the escrow smart-contract. Half of this deposit is for the payment of the item to the seller (\$100), and the other half is your security deposit (\$100) which you'll get back, with no fee, after the transaction is completed.

To learn more about Particl's Two-Party Escrow system, head over to the *Two-Party Escrow System Explained* in-depth guide.

Can anyone else other than the seller see my shipping address?

No. Only the seller can access your shipping details. Neither Particl nor anyone else can collect your personal information. Particl is entirely decentralized, secure, and private by design.

How can I directly contact a seller?

You can leave a comment in a listing's *Comments and Reviews* section. This will notify the seller that they've received a message, and they'll be able to answer you. Keep in mind that the *Comments and Reviews* section is public, meaning all messages you and the seller leaves there are publicly visible.

Alternatively, sellers may sometimes leave their contact information such as an email address or instant messaging application username in their listing descriptions. Look in there and see if you can find something.

A more complete and private messaging/inbox system is being developed and will be added later during the Beta phase of development. To know what next features are planned for the *Particl Marketplace*, refer to Particl's development roadmap.

How can I ask for a refund or return through the marketplace?

Due to the current stage of development of the *Particl Marketplace* (Beta), this feature is currently not supported. If you want to ask a seller for a refund or return, please try to reach out to them by their provided contact information or through the *Comments and Reviews* section of the listing you have an issue with.

Direct messaging and a resolution center are planned features for later on during Beta. To know what next features are planned for the *Particl Marketplace*, refer to Particl's development roadmap.

Where can I find the tracking number of one of my orders?

When a seller leaves you a tracking number, you can check it out right from your Particl Desktop client. To do so, head over to the *Orders* page of the *SELL* section, find the order that you want to find the tracking number of, and click on it to expand its details.

A seller may not always leave a tracking number, but when they do, that's where you'll find it!

How can I cancel an order?

It's only possible to cancel an order if the seller hasn't yet accepted it. Otherwise, you can try reaching out to the seller by their provided contact information or through the *Comments and Reviews* section of the listing.

Vendor's Frequently Asked Questions

How can I edit or delete a listing after it has been published?

Due to the current stage of development of the *Particl Marketplace* (Beta), it is currently not possible. If you want to change the description or image of an item, please publish a new listing.

This functionality will be added at a later stage during the Beta phase of development. To know what next features are planned for the marketplace, refer to Particl's development roadmap.

How can I manage my inventory quantities?

Due to the current stage of development of the *Particl Marketplace* (Beta), it is currently not possible. This is, however, one of the next functionality that is going to be added to the marketplace. It will allow you to manage quantities for your products and various other variants such as sizes, colors, fabrics, etc.

To know what next features are planned for the marketplace, refer to Particl's development roadmap.

How can I offer item options such as size, color, and other variants?

Due to the current stage of development of the *Particl Marketplace* (Beta), it is currently not possible. This is, however, one of the next functionality that is going to be added to the marketplace. It will allow you to manage quantities for your products and various other attributes such as sizes, colors, fabrics, etc.

To know what next features are planned for the marketplace, refer to Particl's development roadmap.

For how long do listings stay on the marketplace?

That's all up to you! The expiry time for listings on the marketplace depends on the listing fee you pay. When publishing one or multiple listings, the *Particl Desktop* client will prompt you to select the number of days you want your listings to be published. Simply choose the number of days you prefer from the dropdown menu, and you're all set!

How can I republish listings after they've expired?

Go to the *Inventory & Products* tab of the *SELL* page and find the template of the listing you want to republish. Click on it to display more options and click on the publishing icon (rocket) next to the market(s) or storefront(s) you want to publish your listing in. You can publish the same listing in many different markets.

Alternatively, you can instead click on the *Batch* (*Re*)*publish*... button on the same page to open up the publishing tool. On there, you can publish multiple listings at once on any market or storefront you have publishing rights.

How can I reply to a question left on one of my listings?

Go to your marketplace *Overview* page and look for the *New questions* and *New answers* tiles. Clicking on them will bring you to the right page and show you all outstanding questions and replies.

Why does my product show up in "Reported listings", and what does this mean?

If one of your listings shows up in the *Reported listings* section, it means at least one person has flagged it as inappropriate. If enough people do the same, it will be taken off the marketplace entirely. If your listing shows up in the reported listings section but still shows up on the marketplace, it means that not enough people have voted to delete it.

Want to know more about Particl's marketplace moderation system? Head over to the *Marketplace Moderation Explained* in-depth guide!

Why are listing fees different between different items?

Listing fees are determined by two dynamic factors — the expiry time of the listing and its size (measured in kb). If you publish your listing for a long time, or if it contains many pictures and a large description, it will be more expensive to list than a smaller listing in comparison.

Vendor's Frequently Asked Questions Regarding Sell Orders

What does each order status mean?

- BIDDING: A buyer has made a bid on an item and is now waiting for you to accept it.
- ACCEPTED: You have accepted a bid on an item and are now waiting for the buyer to confirm payment and lock their funds (payment + security deposit) in escrow.
- ESCROW: The buyer has locked their funds in escrow and is now waiting for you to lock your security deposit as well.

- PACKAGING: The buyer is now waiting for you to package the order and ship it.
- *SHIPPING*: You have marked the item as shipped and are now waiting for the buyer to receive and confirm the delivery.
- *COMPLETE*: The item has been confirmed to be received by the buyer. There are no more required actions in this transaction, and you've received both the payment for the order and your security deposit back.

Why am I not receiving any new buy orders?

If your *Particl Desktop* client is protected by a password (encrypted), **you need to unlock it with your password** so that it can pick up new orders from the Particl network. If you keep your client locked, you won't receive any new orders, and you will not get any update on other ongoing orders.

How can I send a tracking number or note to my customer?

Once you mark an order as *SHIPPED* (*Package and Shipping an Order*), your *Particl Desktop* client will prompt you to enter a tracking number or note to your customer. It's an entirely optional step, but it helps your customers keep track of their order(s).

A complete messaging system will be added during the Beta phase of development. To know what next features are planned for the marketplace, refer to Particl's development roadmap.

How can I manage refunds and returns through the marketplace?

Due to the current stage of development of the *Particl Marketplace* (Beta), this feature is currently not supported. Direct messaging and a resolution center will be added at a later time during the Beta phase of development. To know what next features are planned for the marketplace, refer to Particl's development roadmap.

How can I directly contact a customer?

Due to the current stage of development of the *Particl Marketplace* (Beta), directly messaging a customer is not yet supported. You can, however, send a tracking number or note to your customer as part of the marketplace's transaction flow.

A complete messaging system will be added at a later time during the Beta phase of development. To know what next features are planned for the marketplace, refer to Particl's development roadmap.

How can I cancel an order?

Due to the current stage of development of the *Particl Marketplace* (Beta), it's currently not possible to cancel an order once you have fully locked your security deposit in escrow.

Direct messaging and escrow management/negotiations will be added later during the Beta phase of development. This will let you communicate with your buyer and cancel, update, or resolve orders.

To know what next features are planned for the marketplace, refer to Particl's development roadmap.

5.2 Common Issues

Note: The Particl Academy is up-to-date with Particl's latest version, Particl Desktop 3.0.

Got any issue not mentioned here? Then **let us know** about it so that we can help you out and update the Particl Academy!

General Support Questions

Coins not showing up when importing 24-word passphrase

Make sure you are using Particl Desktop 3.0.

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- Make sure you haven't made any **typo** in any of the 24 words.
- Enter your seed's password, if you have any.
- Try only entering your 24-word passphrase without any password.
- If all else fails, do a hard reset of Particl.

Particl is indefinitely loading a wallet and not starting up

- Make sure you are using Particl Desktop 3.0.
- Close Particl Desktop and reopen it.

Number of coins not showing up in private balances and transaction history

When you hold coins in either blind or anon balances, the balances aren't displayed on your *Particl Desktop* until you unlock it with your password. This is a security measure designed to keep your private balances private from prying eyes.

Marketplace Support Questions

I can't find the marketplace on Particl Desktop

• Make sure you are using **Particl Desktop 3.0**.

No listing is showing up on the marketplace (empty marketplace)

- Make sure you are using Particl Desktop 3.0.
- Check if in the top right corner the *peers* icon is a red circle. If it's the case, check your firewall settings. The *Particl Desktop* client is not able to contact the network. Make sure your internet connection is available at all.
- Leave *Particl Desktop* open for a few minutes so that it can sync the blockchain and load the market data. This can take several minutes and tends to take longer on slow internet connections.
- Reset your market database by first making a copy of your particl-market folder and then deleting it (don't delete the backup copy). Keep in mind this is a last resort solution. It will permanently remove all your market-related data such as current orders, listings, order history, and etc. Make sure that you do not have any active order before doing this step, or you will permanently lose access to the escrow contracts.

Windows

Mac

Linux

Particl-market folder location

%userprofile%\AppData\Roaming\particl-market

Particl-market folder location

~/Library/Application Support/particl-market

Particl-market folder location

~/.particl-market

I can't publish a listing

- Make sure you are using **Particl Desktop 3.0**.
- Make sure you have enough PART in your public or private balance to cover the listing fees.

"Message did not send" error when trying to list multiple items at once

• Make sure you are using Particl Desktop 3.0.

• Scroll down to the bottom of the page and republish the listings that couldn't be sent in a *SecureMessaging* (SMSG) message. You may need to repeat that step a few times until all items are published.

The escrow process is jammed. Neither the buyer or seller can progress further

On rare occasions, the *SecureMessaging (SMSG)* network can encounter message propagation issues. This can lead to issues such as the escrow system not progressing further even when both transacting parties complete the escrow steps. To fix that issue, you can manually resend messages to the other party.

As the seller

As the buyer

- 1. Find the order you want to fix in the Orders tab of the SELL page.
- 2. Note down the order's ID.
- 3. Open the Debug console window by clicking on its icon at the top right corner of your *Particl Desktop* client.
- 4. Click on the Market tab and enter the following command by replacing <ID> with the order ID you've just noted down. orderitem history <id>
- 5. This will give you a lot of data about the order. Copy everything and paste it into a text document to better search for the data you need to continue further.
- 6. Note down the <msgid> values you need for the next step.
 - If your buyer has successfully locked its funds in escrow, but you're not getting that notification and can't progress further, then you need to note down two msgid values: MPA_COMPLETE and MPA_SHIP.
 - If you've sent the item to your buyer, but he hasn't received that notification and can't confirm that he has received the item, then you only need to note down the MPA_SHIP <msgid> value.
- 7. Run the following command(s) in *Particl Desktop*'s Debug window for each <msgid> value you've noted down (MPA_COM
- 1. Find the order you want to fix in the Orders tab of the PURCHASE page.
- 2. Note down the order's ID.

smsq resent <msqid>

- 3. Open the Debug console window by clicking on its icon at the top right corner of your *Particl Desktop* client.
- 4. Click on the Market tab and enter the following command by replacing <ID> with the order ID you've just noted down. orderitem history <id>
- 5. This will give you a lot of data about the order. Copy everything and paste it into a text document to better search for the data you need to continue further.
- 6. Note down the <msgid> values you need for the next step.
 - If you have successfully locked your funds (payment + security deposit) in escrow, but the seller isn't getting that notification and can't progress further, then you need to note down the msgid value of MPA_LOCK.
- 7. Run the following command in *Particl Desktop*'s Debug window by replacing <msgid> with the value of MPA_LOCK. smsg resent <msgid>

In-App Swap Exchange Support Questions

I can't find any exchange to swap crypto for PART coins

This feature is temporarily unavailable. We are working on bringing this back as soon as possible.

Certain cryptocurrencies are not available to swap for PART coins

Not all cryptocurrencies are currently accepted on Particl. To request a coin to be added, fill up this listing form.

5.2. Common Issues

5.3 Get Support

Do you have any questions not answered anywhere on the Particl Academy? Then let us know about it so that we can help you out and update the Particl Academy!

To seek out help, join Particl's **Help channel** on Discord or Telegram, where the Particl community and team will assist you. You can also get help by posting on the community forum.

5.4 Glossary

Some terms may need a little introduction with all this cryptocurrency, blockchain, and technological jargon. We try to keep it short and simple. Here they are.

5.4.1 General Terms

- **Blockchain** Blockchain is a unique design of a *distributed Ledger*. It's essentially a growing list of records that are cryptographically linked. Blockchain on Wikipedia
- **Cryptocurrency** Cryptocurrencies are digital units of a currency that can be transferred person-to-person without requiring a third-party (payment processor) to facilitate transactions. It enables near-free, near-instant currency transactions that cannot be held up, blocked, reversed, or delayed by any party.
- **Decentralization** Decentralization is the process by which the activities of an organization, particularly those regarding planning and decision making, are distributed or delegated away from a central, authoritative location or group. Decentralization on Wikipedia
- **Decentralized Network** A *decentralized* network is a distributed network that runs autonomously. It doesn't rely on a central server or database. Each participant of a *decentralized* network contributes to its well-being. Any communication, exchange of data, or trade is made directly between each user of the platform without any central authority facilitating the exchange.
- **Disintermediation** Disintermediation is the removal of intermediaries in economics from a supply chain or "cutting out the middlemen" in connection with a transaction or a series of transactions. Instead of going through traditional distribution channels, which had some type of intermediary (such as a distributor, wholesaler, broker, or agent), companies may now deal with customers directly, for example, via the Internet. Disintermediation on Wikipedia
- **Distributed Ledger** A distributed ledger (also called a shared ledger or distributed ledger technology or DLT) is a consensus of replicated, shared, and synchronized digital data geographically spread across multiple sites, countries, or institutions. Unlike with a distributed database, there is no central administrator. DLT on Wikipedia
- Node A node is an individual device connected to a *decentralized* network such as a computer, VPS, or mobile phone. Each node contributes to maintaining, supporting, securing, and verifying the integrity of a *decentralized* network. The node itself automatically does these tasks with little to no input from the people running the nodes. Most users of a *decentralized* network access it through a node, whether that be directly (i.e., using one's own computer) or through a third-party node (i.e., service provider).
- **Peer-to-Peer** Peer-to-peer (P2P) communication means two users can communicate without requiring any intermediary assistance (i.e., servers, database, host, etc.).
- **Sphinx** Sphinx is a tool that makes it easy to create intelligent and beautiful documentation. It was initially developed for the Python documentation, and it has excellent facilities for the documentation of software projects in a range of languages.

Tor The Tor network is a free and open-source network that enables anonymous online communication. It protects your digital privacy by anonymizing your IP address. It does so by routing your connection through a vast and global network of volunteers. Tor's intended use is to protect your personal privacy as well as your freedom and ability to conduct confidential communication. When enabled on Particl, it makes your node's IP address entirely anonymous.

5.4.2 Particl Terms

- **Community Market** Community Markets are private by default, and only those knowing about its access keys can join them. The community market creator and owner can decide if publishing items on this market is limited to a group (storefront) or granted to anybody with access rights. Additionally, a market owner has the right to promote their community markets within the *Market Browser* for a limited time in exchange for a small fee.
- **Open Market** The Open Market is the main market on Particl Marketplace. It is enabled by default and is the only market you have access to when launching Particl Desktop for the first time. The Open Market is a general-purpose market where anyone can buy or sell anything with no particular theme.
- Open Market Protocol (OMP) The Open Market Protocol (OMP) is the back-end protocol that makes the Particl Marketplace possible. It is the framework that defines how marketplace transactions, orders, listings, and other key e-commerce functionalities are processed by the SMSG network and the Particl Blockchain. It is the "glue" that sticks everything together. If Particl Desktop is what people use to access the marketplace (the front end), the OMP is what makes it possible in the background (the back-end). To learn more about the OMP Library, head over to the Open Market Protocol Wiki page.
- **Particl** Particl is the brand of a *decentralized* network built using blockchain and P2P technologies. Depending on the context, "Particl" is used liberally to describe various of the *decentralized* network's components which include a cryptocurrency, a *decentralized* marketplace, and other components. However, its main components are as follows:
- **Particl Blockchain** The Particl Blockchain is a decentralized, immutable, and censorship-proof ledger. It is based on bitcoin technology and has been carefully enhanced by the Particl team to provide a more robust level of privacy through industry-leading privacy technologies. The Particl Blockchain processes and validates payments between two users without requiring any third-party such as a bank or a payment processor.
- **Particl Bots** Describes a standardized snap-in functionality within the Particl Desktop client software to enable 3rd parties to offer their services in exchange for PART and automating tasks within Particl Desktop client.
 - As these services are not decentralized, they are not activated by default and need to be manually enabled by the user. Particl Bots can have various purposes, most of the time related to a service, such as providing cryptocurrency exchange capabilities, providing data (i.e., cryptocurrency prices), payment integrations, etc.
- Particl Core Particl Core is the software providing a direct connection to the Particl *decentralized* network. It provides users with all the functions and features of the Particl blockchain. It also acts as a gateway to allow applications to interact directly with the blockchain. Because it runs silently in the background of your computer, Particl Core may often be referred to as a daemon or "particld".
 - Users can easily interact with Particl Core by either using its CLI client (commands on a terminal) or its graphical counterpart Particl-Qt.
- Particl Desktop Particl Desktop is the primary client of the Particl Project and is a user-friendly interface into the Particl network. It is the main point of access into the Particl ecosystem and lets users complete all basic activities one would expect to do on Particl. This includes making cryptocurrency transactions, using the Particl Marketplace, sending messages to other users, and so on.
- **Particl Ecosystem** It describes the whole of any value or participant within the Particl Project economic cycle. Thus, anything or anybody contributing or utilizing Particl's economic model (Particl Coin) or any other Particl Application is a part of it.

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Particl Marketplace The Particl Marketplace is a *decentralized* marketplace that allows two users to buy and sell anything from each other without the assistance of any third-party (i.e., bank, payment processor, centralized marketplace, etc.). It is Particl's flagship application and provides much more privacy, security, and freedom than typical marketplaces. Additionally, since it is decentralized, it charges no sales commission and other similar types of fees. Currently, it's located within the Particl Desktop application.

Particl Network The Particl Network consists of two technologies:

- 1. The Particl Blockchain is a *decentralized* and immutable ledger based on bitcoin technology but carefully enhanced by the Particl Developers with industry-leading privacy technology. The Particl Blockchain secures and testifies payments, exchanging value in a *decentralized* way without the need for any banking system.
- 2. Secondly, a data-layer named Particl SecureMessaging (SMSG protocol) is utilized as a decentralized storage network (DSN) to transfer data between nodes in a privacy-preserving manner. Particl SecureMessaging enables a privacy-proof environment for e-commerce with Particl Marketplace and communications between users without bloating the Blockchain and leaving permanent records.
- **Particl Project** The Particl Project refers to all combined efforts, people, and community contributing to the development, maintenance, promotion, and adoption of the Particl *decentralized* network. It is often simply referred to as "Particl" as well, depending on the context.
- **Particl SDK** The Particl Software Development Kit (SDK) is a set of tools and documentation that enables independent developers to contribute to the Particl Ecosystem (any of its software, product, or service). Its purpose is to speed up the onboarding process of independent developers and streamline all the tools and knowledge they need to acquire to get started.
- **PPoS** Particl uses the Particl Proof-of-Stake (*PPoS*) consensus mechanism, which pays back interest in dividend-like payments to stakers in exchange for securing the network. *PPoS* offers many secure staking options that let you easily and quickly earn rewards without any of the security or financial risks typically associated with staking.

PPoS is also the protocol used to vote on proposals in Particl's decentralized governance model.

SecureMessaging (SMSG) SecureMessaging (SMSG protocol) is a *decentralized* storage network (DSN) to store and transfer data between nodes in a privacy-preserving manner. It enables a private and secure environment for e-commerce and communications between users. SMSG powers the Particl Marketplace without bloating the blockchain with excessive data and without leaving any permanent record.

5.4.3 Particl's GUI Related Terms

Market Browser It's the tool to browse and join different community markets within the Particl Marketplace application. Read *browse the markets* to understand its usage.

5.5 Links

This section is a collection of many useful Particl-related links. It will redirect you to a lot of external content that should help you get your way around Particl. Happy reading!

General

- Website
- · News Blog

- Downloads
- Roadmap
- Whitepaper
- PART Coin Exchanges

Help & Support

- Particl Wiki
- Community Forum
- Issue Tracker (Particl Desktop)

Metrics and Numbers

- Block Explorer (Insight)
- Block Explorer (CryptoID)
- Real-time Particl Statistics
- Particl Marketplace Web (Alpha)
- Staking Revenue Calculator

Chats, Socialmedia, Forums

- Discord
- Telegram
- Element / Matrix

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- Twitter
- Youtube
- Reddit
- Instagram
- Facebook

- Forum (Community)
- BitcoinTalk
- Github

Part-Time Show Podcast

- Youtube PTS
- Buzzsprout PTS
- Spotify PTS
- Google Podcast PTS
- Apple Podcast PTS

CryptoRamble

• Youtube CR

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Particl Academy, Release latest

- FAQ Frequently Asked Questions
- FAQ Common Issues
- FAQ Get Support
- Glossary Terms and words explained

CHAPTER

SIX

TECHNICAL DOCUMENTATION

More technical documentation can be found in these locations.

- Particl's Wiki
- Particl's GitHub

CHAPTER

SEVEN

RESOURCES AND LINKS

- Download Particl Marketplace
- Website
- News Blog
- Extensive list of links

Note: This documentation is up-to-date with Particl's latest version, **Particl Desktop 3.0**. Please keep in mind this software is still in *BETA*, and as such, lots of features are regularly added.

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