



ADAPROFIT
Cardano community stake pools

Delegation guide

v1.01 - 07.25.2020





About ADA4PROFIT

ADA4PROFIT is an initiative co-owned by blockchain and Cardano enthusiasts located in the EU and the USA.

We are stake pool operators on the Cardano blockchain. We run and maintain several nodes to secure this decentralized network.

We are no financial advisors, you have to do your own research and due diligence before making an investment decision.

Everything written in this document is our personal opinion.



Stake pools

Stake pools play an important role in the decentralization of a blockchain network. They validate all users transactions on the network.

Blocks

Transactions on the network are stored in blocks and are protected with cryptography to avoid tempering of transactions. These blocks are chained together in a ledger, hence the name blockchain.

Ledger

A chain with blocks is called a ledger. In a ledger, blocks (with transactions) are append only, or in other words the ledger is *immutable*.

Immutable means, noone will be able to modify a single transaction before the block is entering the chain.

Cryptography

Through cryptography blocks and transactions are protected from modifications. Before blocks can enter the chain, a validation mechanism ensures that blocks are not altered by fraudsters.

A stake pool consists of one or more nodes. Relay nodes and pool nodes. Relay nodes are connected to other relay nodes in the network, in private or public mode. A relay node forwards the status of the chain to other nodes in the network, privately to its stake pool node and trusted relay nodes, publicly to other public relay nodes.

A stake pool node is responsible for validation of all users transactions made on the network. Blocks will be randomly assigned to a stake pool node on basis of a lottery system.

Relay nodes belonging to a stake pool node are forwarding blocks from the network to its stake pool node. Once a block is assigned to that stake pool node by the lottery system, the stake pool node validates the block. Thus, relay nodes are securing the stake pool node from directly being exposed to the internet and the stake pool node is securing the network.

Validation

Validation is the process in which the stake pool node validates the cryptographic outcome of individual transactions and the complete block of transactions, to assure they are not tempered.

Once the validation is done, the outcome is broadcasted on the network to other relay nodes. These forward the outcome to be verified to their stake pool nodes. If the majority of all the stake pool nodes in the network comes to a consensus that the outcome is correct, the block will be appended to the chain.

Rewards

Stake pools who validated a block that was appended to the chain, will get an incentive in the form of a reward.

The reward is being split between the delegators to the stake pool, based on their stake weight percentage in that stake pool, after subtraction of the stake pool fixed and operational costs.

Stake pool fixed costs are required to compensate stake pool owners (operators) for their hardware costs (running multiple relay nodes and a stake pool node). Operational costs are required to compensate stake pool owners for their daily job in maintaining and updating their system and nodes to keep the network secure.

A delegator to a stake pool earns from the work of the stake pool owner. Through contributing its stake in the network, to the total amount of stake in the pool of that owner.

The more delegators a stake pool has, the higher the chances are that the lottery system is favoring the stake pool. Since its total weight (in stake) securing the network is high.

The importance of stake pool operators

Securing the network



51 % attack

In fact before mentioned process of delegation to a stake pool is much more complex.

There could be bad actors under stake pool operators, that would be able to undermine the network by receiving the majority of stake from delegators, thus forging more blocks to be validated. They could gain control over the network and the network would lose its desired decentralization characteristics.

This is known as the 51% attack. Where one or more individuals gain the majority of the stake in the network.

The Cardano blockchain has many built-in mechanisms to avoid undermining of the network. Bad actors will be penalized accordingly.

These protection mechanisms were simulated and tested in the labs of IOHK and several universities before extensively being tested in a live environment for several months.

Hundreds of pool operators were actively participating during the Incentivized Test Net and Haskell Test Net period. Results were carefully analysed, feedback was collected, network parameters were tested, and tuned to ensure that the Cardano network is resilient against bad actors.

This rigorous process of testing and verification takes time. It ensures that the quality of the product being delivered, during the Shelley Mainnet launch, will be outstanding. Making the Cardano blockchain the most decentralized open source blockchain until now.

Cardano the most decentralized open source blockchain



About Cardano

Cardano is a third generation block-chain based on the **Proof of Stake** consensus algorithm. It is more advanced than both Bitcoin and Ethereum. Which are first and second generation block-chains, based on the Proof of Work consensus algorithm.

The Proof of Work consensus algorithm is based on miners, servers with many graphical processing units (GPUs) that consume a lot of energy.

For the Proof of Stake consensus algorithm, normal servers can be used. Resulting in a much lower energy footprint.

In a Proof of Stake system like Cardano, transactions are the fuel for the rewards being paid to the stake pool operators and delegators. While in a Proof of Work systems, more coins are created as rewards, for the miners or mining pools.

Users that like to participate in a Proof of Stake system, need to lock their personal owned ADA in a stake pool, in order to be able to receive rewards for their stake in that stake pool.

What makes the Cardano project unique in comparison to other projects?

The project is carried by a large team of very smart people with at least a Phd degree.

Their methods of development are rigorous, not seen before in any blockchain project.

All technical and design papers of their blockchain solution are scientifically proven and peer reviewed by the smartest people in the industry.

Their network of connections with enterprise companies and governments is in one word impressive.

In our opinion, this is what differentiates this project from all other blockchain projects. We are convinced that Cardano is setting the new standard for the blockchain industry as a whole, an industry that is still very young and not

yet mature.

Not only from the technological side, this project excels with groundbreaking improvements and innovations like the Ouroboros Praos Proof of Stake algorithm. From the business perspective everything is very well thought out and planned.

One of the main goals of the Cardano project is to help the unbanked people in Africa getting banked.

Cardano established early their contacts with local governments in Africa. They started education programs and all kind of other initiatives, to drive future adoption of their solution.

Africa alone has a population of 1.3 billion people from which most are unbanked, but most of them are young and have access to a mobile phone ideal for a blockchain based financial system.

Gaining only 20% of this market would mean 260 million potential users for their blockchain. With a maximum supply of 45 billion ADA this would translate into ~173 ADA per person.

This is not the only use case scenario for Cardano. Cardano is also developing a solution against counterfeiting of brand products and provides developers, industries with long needed tools and libraries to easily build smart contracts.

Also they will release an ERC20 convertor. Via this convertor Ethereum based or ERC20 based tokens can be easily moved on to the Cardano blockchain. The advantage of this solution is that existing solutions build on the Ethereum blockchain can now enjoy all the benefits of a 3rd generation blockchain solution, such as faster transactions, cheaper transaction fees, better scalability and interoperability, just to name a few.

In our opinion, these kind of use cases will drive the adoption of the Cardano blockchain and should increase the price of 1 ADA significantly over time.

Proof of Stake VS Proof of Work



Shelley Mainnet launch

In August 2020 the Cardano main network based on the **Shelley phase** will go live. Cardano will become a fully decentralized network.

Actually over hundred times more decentralized than Bitcoin.

Everyone can be part of this network by acquiring a stake in what we think is the *"operating system of the future"*.

You can buy ADA tokens from an exchange and put them to work for you by delegating them to a stake pool of your choice.

By delegating your stake, you are helping to secure the Cardano decentralized network. You will be rewarded with ADA for your stake weight in a stake pool.

The price of 1 ADA ~ 13 dollar-cent on 7/25/2020. Please remind this price in 5-10 years from now.

Rewards are automatically compounding in your delegated wallet (address) to earn even more rewards.

On basis of simulations the guaranteed return on stake will be around 5% per annum on a good saturated pool. This is very generous in comparison with a bank savings account.

You can find a staking rewards calculator via following url <https://testnets.cardano.org/en/shelley/tools/staking-calculator/>

What is a decentralized network?

Decentralization is the transfer of authority from a central to a local government. With other words in case of the blockchain the network is not owned and governed by a central authority but by its participants (stake pool operators, delegators and the daily users of the network).

Why is decentralization important?

Decentralization creates an efficient and reliable administration, intensi-

fies and improves local development, ensures the rights of the local population better to have a voice in the government of the network, and better protects minorities.

Compare this with our banking system, where the authority is in the hands of a selected group of people and governments. It is obvious that the blockchain is an unstoppable upcoming revolution against these existing centralized systems of finance.

In our opinion, blockchain solutions like Cardano will play a very important role as financial backbone in the fourth industrial revolution of the internet.

Financial crisis 2007

We all know what happened back in 2007 during the financial crisis. Almost our complete financial system collapsed because of bad decisions made by a small group of centralized bankers, backed by their governments. Whom speculated heavily with our live savings.

Even today we feel the pain of their decisions by the unlimited amount of money being printed. Thus, deflating the value of our currencies. Altogether with zero interest on our bank savings account and ever increasing taxes. This makes that the average Joe like you and I, have less to spend. We are being robbed from our wealth by centralized made decisions on which we have no influence at all.

Lets stop this and join the blockchain revolution ! Lets choose together for another system that is far cheaper, more efficient, less energy consuming, more secure and less fraudulent than the current centralized systems in the hands of a small group of people who make the decisions.

**~ 5 % Return On
Stake guaranteed**



Buy ADA

ADA4PROFIT prepared a instruction in which you are guided in several steps how you can reserve your stake in the *“operating system of the future”*, the Cardano blockchain

Sign up at an exchange

In order to buy ADA you need to sign up at an exchange. There are many exchanges, but we advise you to buy your tokens at an exchange with a good reputation. Examples are: Coinbase and Kraken

We will use the Kraken exchange to guide you through this process, but of course you're free to choose your own favorite exchange.

You can reach the Kraken exchange via the following url: <https://kraken.com>

Once on their website of Kraken in the right top corner click on the **Create Account** button. This will open a screen where you have to provide the following required fields:

- Email
- Username
- Password

Make sure you use an email address that is well protected and a password of minimal 24 characters (a mix of numbers, characters and special characters). Store these details safely and do not loose or share them.

Create your account
Buy, sell and trade cryptocurrency on the world's most secure exchange.

* Email

* Username

* Password

Security tip: Do not reuse an existing password

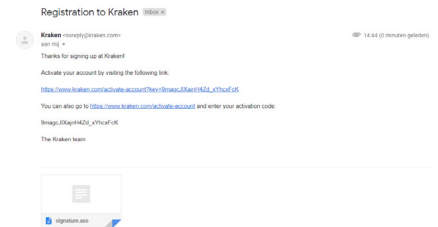
Where is your primary residence?
Netherlands

By continuing I agree to the [Terms of Service](#) and [Privacy Policy](#)

*** Required fields**
What information is required to open a Kraken account?
How can I enable two-factor authentication (2FA) on my account?
Will using a VPN affect my application?

The country of origin is required because of KYC and AML requirements.

Once you have submitted your details you will receive an email on the email address specified in previous step.



Click on the link with the code to activate your account. Provide your username and password and click the CAPTCHA check to verify that you are not a robot and push the **Accept** button.

Activate your account
We just emailed you an activation code. Enter it below and sign in to get started.

Prove you're not a machine
I'm not a robot

[Accept](#) [Privacy Notice](#)

Your Kraken account will be opened and you will be asked to provide the type of account you would like to open. For most of us this will be a personal account, so choose this option.

Account Verification

Select the type of account you want to create
Are you creating this account for yourself, or on behalf of a business or corporation?

☐ PERSONAL ☐ BUSINESS

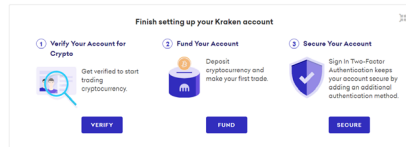
Next you choose your account type, a **Starter** plan would be in most cases sufficient.

Select an account type
By providing us with some basic information you can start trading with cryptocurrency or with more information you can get verified to also deposit, withdraw or trade with fiat currency (USD, EUR, GBP, etc.)

Starter	Intermediate	Pro																								
<p>Everything in Starter, plus:</p> <ul style="list-style-type: none"> Deposit & withdraw digital assets Buy/sell/trade digital assets Trade with margin 	<p>Everything in Intermediate, plus:</p> <ul style="list-style-type: none"> Deposit & withdraw with fiat Buy/sell/trade with fiat Higher funding limits Higher API limits Crypto futures trading 	<p>Everything in Pro, plus:</p> <ul style="list-style-type: none"> Personalized Funding Limits Higher margin limits Higher API limits Over-the-counter trading 																								
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After this you have to verify your account details that are required for the plan you choose in the previous step.



Next step according to Kraken is to deposit money to your newly created account. We would strongly advise you to enhance your security first by activation of 2FA or two factor Authentication.

In case of an Authenticator app, we would strongly advise you to use Authy over Google Authenticator as recommended by Kraken. In case you lose your phone or damage it, it is very hard to recover your accounts stored in Google Authenticator since it does not provide you with backups of your 2FA accounts.

If you want to further harden your security you can also make use of Yubikey on Kraken in combination with 2FA. Yubikey is a hardware key protection which cannot be compromised by hackers on distance.

You can watch the following instruction videos of Kraken how to harden your security of your Kraken account.

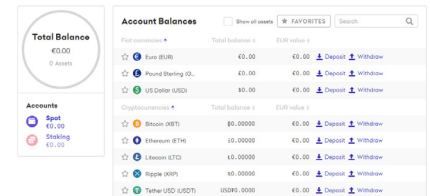
https://www.youtube.com/watch?time_continue=1&v=wUGmorieSGs&feature=emb_logo

<https://www.youtube.com/watch?v=klrgYhRMwSQ&feature=youtu.be>

Once your security is set you can start funding your account with fiat money. The method will be dependent on your native currency.

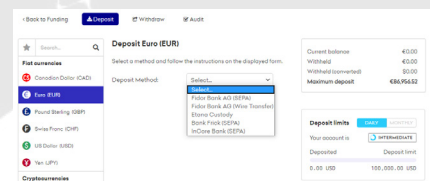
Click on the **Fund** menu and the following screen will appear, depending on your country of origin other currencies may be shown for you.

Below we will explain the procedure for funding in Euros and in US dollars.

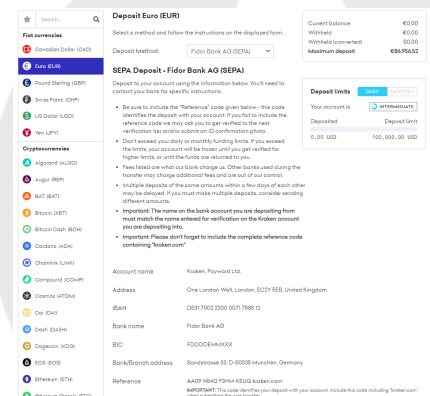


Funding your Kraken account with Euros

Click on deposit link behind the Euro currency to start the deposit process. A new screen will show where you get several options to fund your account.



Our personal favorite is using SEPA payments via the Fidor Bank in Germany.



Once you have selected your method of payment a description will appear describing the process of payment.

- To who you should pay: **Kraken Payword Ltd.**
- To what bank account you should pay: **IBAN**
- The payment reference: please make sure you place the exact **Reference** in the description of your payment so it will end up on your Kraken account and not on that of someone else.

Security should be your main priority



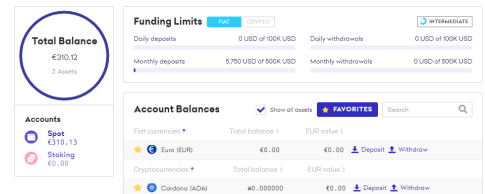
Once you have made your payment to the mentioned bank account (IBAN) with the correct reference it will take one to two days to arrive on your Kraken account.

Kraken will send you automatic an email to your accounts email address that the deposit has been arrived.

Funding your Kraken account with Dollars.

Funding your Kraken account with US Dollars is a little bit more complicated since you will have only one choice, payment via Etana Custody.

If you do not have an account yet with Etana Custody, you have to create one and undergo a KYC procedure similar like you did before for opening your Kraken account.



Buying ADA

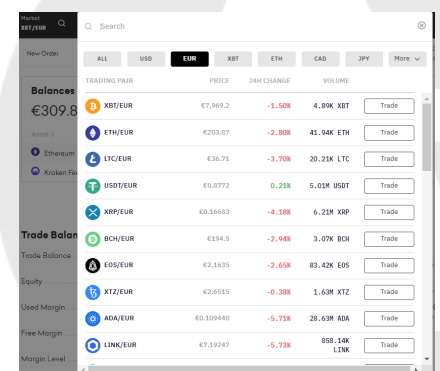
To buy ADA we have to choose a trading pair. For this we click on **Market** and a popup window will appear with currencies to choose from.

In case we like to buy ADA with Euro, choose the EUR button, in case of US Dollars choose USD. Next we can choose the currency we like to buy for the choosen trading pair.

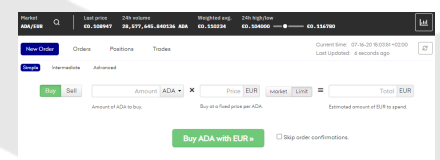
In our case this will be ADA.

So in our case, buying with EUR, you choose to click on, **Trade** at ADA/EUR trading pair.

In case you buying with USD, you choose to click on **Trade** at the ADA/USD trading pair.



Once you have clicked the **Trade** button you will be brought to the Order entry screen and the option **New Order** is active. In the left top of the screen you will see your selected trading pair, here ADA/USD.



Funding your account is nothing more than a bank transfer

The process itself is straightforward, once you passed the KYC procedure and made your payment to Estana custody your Kraken account will be funded within a few days and you can start buying your ADA.

Similar like with a Euro payment once your US Dollar payment reaches your Kraken account, Kraken will notify you per email that a deposit has been received on your account.

Your Euro or US Dollar payment should show up in your dashboard showing your account balances, see sample image.

Once our account balance in Euro or US Dollar is larger than zero we can start buying ADA.



Do not send real ADA to a Shelley Testnet wallet

In the Order screen you can specify the amount of ADA you like to buy and the price you like to pay for one ADA.

You can also specify the amount you like to invest and the price you like to pay for one ADA. The amount will be automatically calculated for you.

Make sure you buy under all circumstances with a **limit order** instead of a market order. In case of a limit order you can set the price you like to buy for and in case of a market order you pay the price it is currently traded for on the market.

Try to buy graduated down on price for the amount you're willing to spend. Your average price on ADA will be cheaper than buying all at once for a certain price. Prices always fluctuate and you can take advantage of this knowledge by buying cheaper than the current market price.

Make sure you check your order carefully before hitting the, **Buy ADA with ...**, button.

Once your New Order is submitted it will show up under **Orders**.

Once your New Order gets filled it will show up under **Trades**.

Positions shows your actual ADA positions.

Now that you have bought your ADA you need to transfer this ADA from the Exchange into a personal wallet.

Cardano is delivering the Deadalus Shelley Mainnet wallet to store your ADA. We will make use of this wallet to securely store your just bought ADA.

We will communicate which wallet you have to download for this process on our website, and via our social media channels, once the Deadalus Shelley Mainnet wallet is released.

For the sake of simplicity we will use the Deadalus Shelley Testnet wallet now to explain the whole process of transferring your ADA from the exchange to

your personal wallet and stake it into a stake pool.

NOTE: Be careful do not send your real ADA you just bought on the exchange to this Deadalus Shelley Testnet wallet since you risk losing all your money.

ADA4PROFIT is not responsible for any mistakes made by yourself that causes the loss of your ADA.

Installation of the Deadalus Shelley Testnet wallet

Download the software for your operating system, the Deadalus Shelley Testnet wallet will be available for download in the following flavors:

- Linux
- Windows
- Mac OS

When the Shelley Mainnet goes live we will be downloading the Deadalus Shelley Mainnet wallet.

The process of installation is pretty straightforward, and will be similar for the Deadalus Shelley Mainnet wallet.

Once you have downloaded the software you can verify it via the provided checksum to be sure that the software is not tempered by someone else. You can find the instructions for this on the download page.

If you are sure the software is not tempered and the checksum is ok, then you can proceed installing the software.

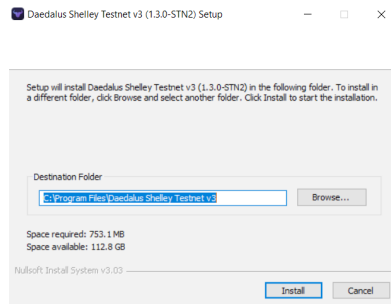
A even more rigorous verification process via PGP trusted certificates is also available and could be used, but this requires additional software to be installed.

On the next page we are showing the process installing Deadalus Shelley Testnet wallet for Windows, the process on Linux or on Mac OS is similar, only the representation of the screens of the wallet might look a little different.



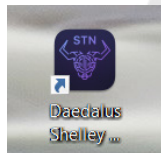
Daedalus installation

Under Windows we double click on the Daedalus Shelley Testnet wallet software we downloaded, this will bring up the installer.



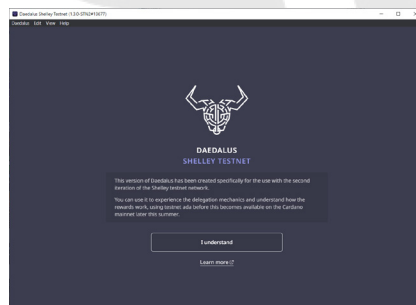
It shows a default installation directory where it will install the software. You may want to overwrite this with your personal preference before clicking on the Install button.

Once the software is installed you will find an icon on your Windows desktop, this will be similar for Linux and Mac OS.

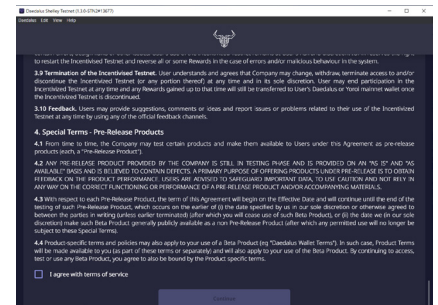


*Use a verified wallet
only for your real ADA*

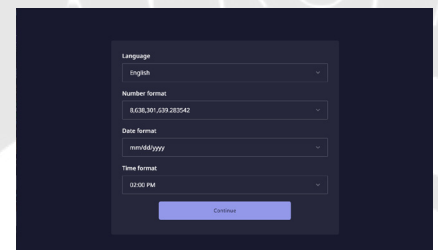
You can double click this icon to start the software. The intro screen will show up with information about the wallet, which in case of the Daedalus Shelley TestNet wallet has to be confirmed with **I Understand**.



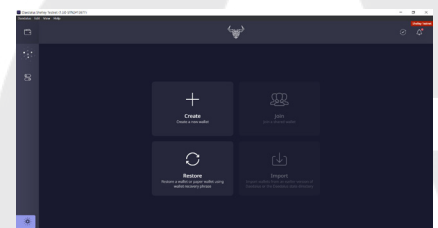
Once this is confirmed the Terms of Service screen will show up, you need to read them carefully and scroll down till you reach the checkbox **I Agree** with terms of service and click this when are willing to agree with the terms of service and press **Continue**.



Next you will get a internationalization screen where you can set your preferred representation within the wallet, after done press **Continue**.



Now the main screen appears, in this screen you can create or restore a wallet.



Restoring a wallet is only needed in case you uninstalled the software or you moved to another computer or OS, so we are going to concentrate ourselves on creating a wallet.

We need a wallet to store our ADA we bought on the exchange in order to be able to delegate our ADA stake in a stake pool and earn rewards for our stake in protecting the Cardano decentralized network.

Note: It is always a good practice to have your ADA under your own control instead of leaving it on an exchange. Exchanges are vulnerable for hacking attacks since they are centralized.



Create a Wallet

Even though your ADA is under your own control this does not mean you are secured against hackers. You need to make sure that your personal computer where you installing the Deadalus Shelley wallet is well protected, with a recent internet security suite and that you are the only person that has access to it.

Create a Wallet

Click the **+ sign** to create a new wallet, a wallet can be compared with a bank account it is a unique address that is only for you.

You can create multiple accounts or wallets without any costs. In case you like to delegate your stake over multiple pools you need to split up your owned ADA over these accounts.

You have to prove the following two attributes to your wallet:

- **A unique wallet name**
- **A spending password**, make sure you use a secure password and you store it safely since only with this password you are able to spend or delegate your owned ADA

After you have stored your Spending password safely press **Create Shelley wallet**. The Recovery Phrase message will appear on your screen.

Make sure you read this message carefully since you can only recover a wallet if you have your recovery phrase safely stored.

Once you have read it carefully click the checkbox and Continue.

All the 15 words making up our wallet recovery phrase are covered here since they should not be shared with anyone.

Warning: Never share your recovery phrase with anyone. Make sure it is stored safely and do not loose it. In case you loose your recovery phrase you are loosing access to your wallets and as such all your assets !!

Once you have secured your recovery phrase click on **Yes, I have written down my wallet recovery phrase**.

On the next screen you have to confirm your recovery phrase. In the top rectangle it will show all the words of the recovery phrase and below you see these words randomly presented.

You need to click the words in the order of the recovery phrase presented in the top rectangle. Selected words will grey out and unselected words will be shown in white. Once you have all selected in the order of the recovery phrase press **Confirm**.

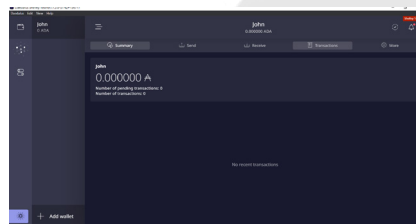
Store your recovery phrase safely and do not share it with anyone



Create a Wallet

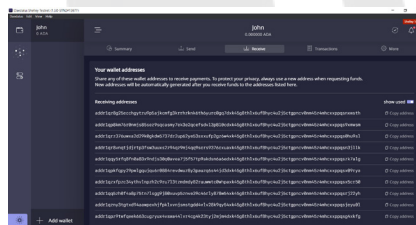
Next you are asked to confirm the questions below, please click the check boxes and press **Confirm** that you understand the risks related to losing your recovery phrase.

Your wallet is now ready, it shows the name and the balance which is currently zero since we haven't transferred any ADA to it yet.



Get tADA from the faucet

So the next thing we have to do is to fund our account with some balance. In order to do so we have to click on the Receive button on top of the wallet. Once done we see a list of receiving addresses being presented by Deedalus.



The idea here is that you use every time when you like to fund your wallet with ADA a new address. Once the address has been used it will not show again. This way transactions are better secured, since no one will be able to know the address upfront you are transferring your ADA to.

You can copy one of the receiving addresses presented to the clipboard by

clicking on **Copy address**. Once copied a confirmation message will show in the top of your screen.

This receiving address we will use in our created Kraken account, but remember we will use that only on Shelley Mainnet thus from the Daedalus Shelley Mainnet wallet and not with the Deedalus Shelley Testnet wallet we are using here. So be careful **do not transfer real ADA** to a Shelley Testnet wallet !!

Since we are using the Shelley Testnet wallet in our explanation we will make use of a faucet to fund our freshly created wallet with tADA (or test ADA).

The Shelley Testnet faucet can be found via the following url: <https://testnets.cardano.org/en/shelley/tools/faucet/>

Once you open the url you will be asked to enter the address to send funds to and to confirm the reCAPTCHA before pushing the **Request Funds** button. (You can skip the API key field)

Once Requested you will receive 100.000 tADA in your wallet. Under **Summary** it will show your balance and the transaction that you received funds.



Since we now have funds on our account we can delegate our stake (percentage of all the ADA in circulation in case of the Shelley Mainnet) to a stake pool to receive rewards for this stake. Here we are using tADA to simulate this process.

Before we are continuing with this process we are going to explain to you how to choose a good stake pool to delegate your stake to. It is important that you choose your stake pool wisely. Real money is at stake and you should make sure you're betting on the right horse. Your stake is safe and taken care of. It grows over time delivering you an excellent return on stake.

When there is money in the game, bad actors are trying to take advantage of this. So please be careful with your money, do not fall for scammers !!



How to pick your pony?

There are many factors to consider when in choosing a good stake pool. You could consider asking the following questions to yourself. Try to find out as many answers before delegating your stake to a stake pool.

- Is the stake pool operation a single person or is he/she backed by a team.
- Does the pool operation has the required skills to run a stake pool professionally.
- How much effort is the stake pool operation making to attract delegators?
- Does the stake pool operation run their node(s) from a single computer at home with a standard internet connection or do they use professional equipment or cloud services.
- If the stake pool operation runs on professional equipment or cloud services, are these services dedicated or shared (bare metal vs. virtual private servers).
- Does the stake pool operation has backups in place and are these backups stored on a different servers?
- How does the stake pool operation mitigate the risk related to an system outage?
- Does the stake pool operation has multiple nodes and where are they located, in the same data center or in different data centers.
- Does the stake pool operation make use of modern technologies which are not tied into the OS of the server to reduce the down time. Think about docker, docker-compose, docker-swarm or kubernetes.
- What did they do regarding the security of their stake pool operation?
- What is the skin in the game of the stake pool operation. Also known as pledge.
- How many co-owners does the stake pool operation have? What are the potential risks of running a stake pool operation with multiple owners. Do they have a business plan or contract in place?
- What is the long term plan of the

stake pool operation? Do they contribute also to the Cardano ecosystem.

- Do they return their rewards back into the stake pool so that their delegators profit from this?
- How many delegators does the stake pool operation have, and what is their plan to acquire delegators?
- Is the stake pool operation active on social media, for example Twitter, Reddit, Telegram, Facebook etc.
- Does the stake pool operation has an own YouTube channel?
- Does the stake pool operation has a website and how much work has been put into it, think about blogging on a regular basis.
- What does the stake pool operation do to share information and educate their delegators?
- Does the stake pool operation contribute to the community?
- Is the stake pool operation dedicated and passionate?
- Is the stake pool operation public facing, can their team members be contacted directly?
- Was the stake pool operation active on ITN and how did it perform?
- How did the stake pool operation perform on Shelley Tesnet I and II ?
- How is the stake pool operation going to perform on the upcoming Mainnet candidate?

There are so many factors to consider, it is hard to list them all here. We did sum up just a few to inform you that you should wisely choose for a stake pool operation after all they are carrying the responsibility of your money.

A good stake pool operation would try to be as transparent as possible to their delegators in answering questions about their operation without any doubts.

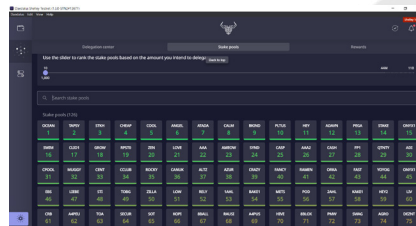
***Do your own research
before delegating
your stake to a stake
pool***



Delegation

Now that we have some tADA in our wallet and know what kind of questions to ask ourselves before delegating to a stake pool, we can concentrate ourselves on the delegation process from within the Daedalus Shelley Testnet wallet since there are still a few weeks left before the actual Shelley Mainnet goes live.

There are two ways to delegate your stake, via the [Delegation center](#) and via the [Stake pools](#) button. We are choosing for the Stake pool option since this way we are able to see all the stake pools and their so called ranking.



The ranking of a stake pool is automatically provided by the Daedalus wallet and it is dependent on the desirability of the stake pool.

There are many factors that are making up the desirability of a stake pool, some of them are:

- Pledge or “skin in the game” of the stake pool operation
- Cost per epoch for the stake pool operation, this is to cover their expenses on hardware
- Pool margin, a percentage of the total rewards goes to the stake pool operation, this is to cover their expenses in operating and maintaining their stake pool operation
- Relative stake as part of the total stake
- Delegation, total contribution to the pool by users seeking for return on stake for their contribution in securing the network
- Produced blocks, how many blocks was the stake pool able to forge since it joined the network

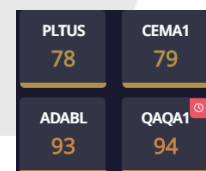
Study these factors carefully and see what they mean for you. Also have keep an eye on the desirability of a pool over

time. A highly saturated pool (pool with too many delegators) is less desirable than a pool that is not highly saturated.

The desirability of a stake pool can be measured by the color of the stake pool. A green coloring stake pool is highly desirable, an orange coloring stake pool is getting saturated so is less desirable, and a red coloring stake pool is not desirable at all. A pool that is less or not desirable will bring the delegator less rewards. During the Shelley Mainnet the desirability will be shown with a progress bar indicator.

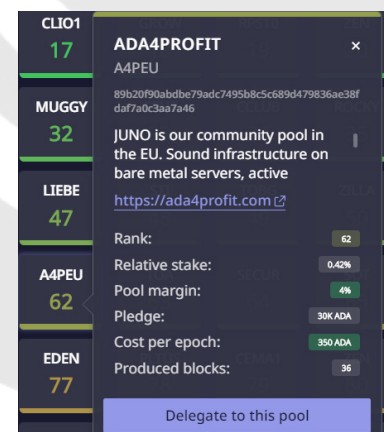
Current colors as shown in the image on the left; green, orange and red are indicators for how many blocks the pool is minting in a certain timeframe. A pool minting more blocks is more desirable since this bring rewards for the delegators.

There are also pools with a red square in the right top corner of the pool ticker. In such a scenario the stake pool has been retired by the owner(s).



You should not delegate to a stake pool that has been retired since it will not mint any blocks, so you will not receive any rewards on your stake.

By clicking on the ticker of the stake pool with below its ranking, you will see more information about the stake pool.



Desirability of a stake pool is expressed via a color scheme



Pool information

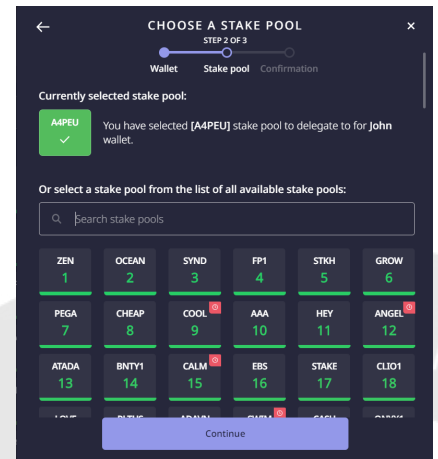
In the pool information screen you will find the unique Pool ID and the description of the pool by the pool operation. Further you find the link to the website of the pool operation and the factors that making up the desirability of the stake pool.

It is important to verify the Pool ID. Since there might be bad actors, who are impersonating other pools that are forging many blocks. They want to lift on the success of those pools by doing nothing else, then pulling a pool up with similar identity in the hope they get as many delegators. This way they can earn easy money over the back of delegators and the pool operations that are putting a lot of effort in their stake pool and marketing activities.

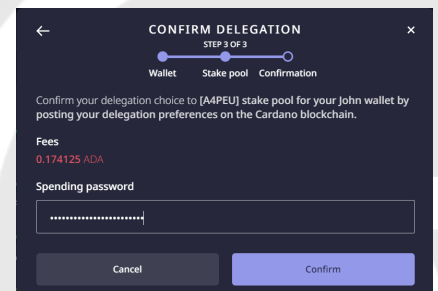
Once you have made your choice for the stake pool you like to delegate to you push the button **Delegate to this pool**.

A screen will popup showing the next steps to make, press **Continue**.

still decide to select another pool by searching for one. We are pressing **Continue** to go to the delegation confirmation screen.

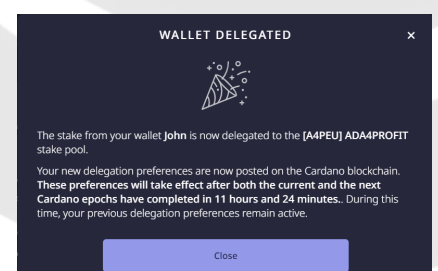


In the confirm delegation screen we see the fees for the delegation and we have to provide our spending password before we can **Confirm** the delegation.

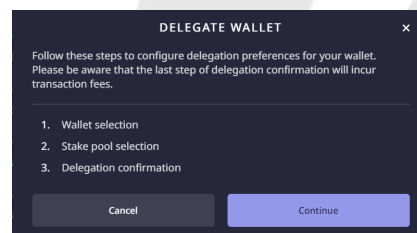


We are only able to spend from our wallet using the spending password. Behind the scenes a transaction is initiated and to fuel this transaction on the blockchain a fee is applicable.

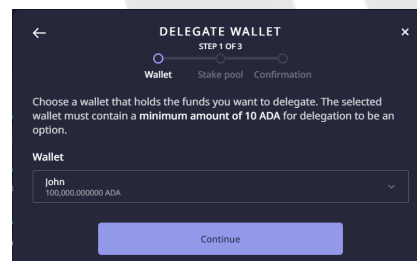
The fee is very low on the Cardano network in comparison with the Ethereum network. Once the transaction is completed below message will appear.



Delegated ADA stays always in your possession



Next we select the wallet from the drop down box and press **Continue**.



A user can have multiple wallets from which can be delegated to different stake pools.

Since we started the delegation from the ticker of the pool. It already shows the Stake pool of choice, but you can

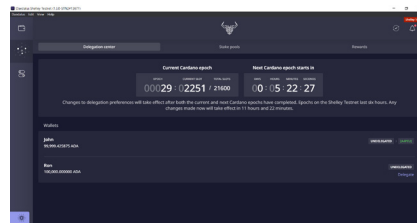


Successful delegation

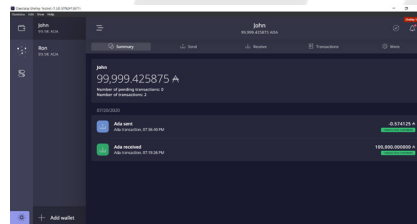
We can see from the information screen that we delegated from the wallet John to stake pool ADA4PROFIT with ticker[A4PEU].

Also we are informed that the delegation will not be immediately effective but only after the current and next epoch are completed.

Under the Delegation center we can find the delegation back we made, but we can see it is still not made effective.



Under Summary we will find the transactions back made for our wallet. The last transaction is shown on top, these are the costs related to the delegation and the network costs, hence Ada sent.

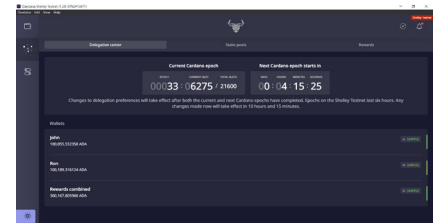


There are costs related to the delegation and network costs to fuel the transaction

Underneath this transaction is the transaction made from the faucet where we were receiving 100.000 tADA on our wallet address, hence Ada received.

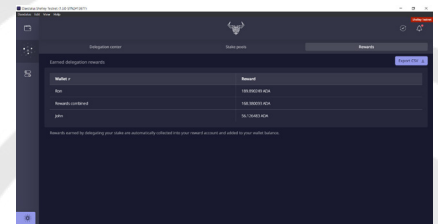
To wrap all up we have made a successful delegation from the Deadalus wallet to a stake pool. After the current epoch and the next epoch is finished the stake is becoming active for rewards in case the stake pool selected is forging blocks.

Once the delegation is active it shows without the UNDELEGATED label in the Delegation center. It is similar to the one in the next picture.



We can see from the balance of the John wallet, that we already received rewards. Since the balance exceeds the initial 100.000 ADA we received from the Faucet, minus costs for delegation and fueling the transaction on the network.

To see the exact amount of rewards from the pool we delegated to, we can push the **Rewards** button.



Since the rewards are received in the same wallet from which is delegated, they get automatically compounded.

As a delegator you can revoke your delegation at any time from the **Delegation center** by pushing on the **Undelegate** or **Redelegate** option. Redelegation allows you to delegate to another stake pool, but remember it will take about 2 epochs before this becomes effective.



Kraken exchange

Now returning back to the Kraken exchange. In case of the Shelley Mainnet, we do not have a faucet, but we have to use our bought ADA from the exchange to fund our wallet. **Remember do this only with the Daedalus Shelley Mainnet wallet !!!**

The same procedure is valid like we have shown with the Daedalus Shelley Testnet wallet.

1. We need to push on **Receive** from the wallet to acquire a receiving address, copy it and store it at the Kraken exchange under **Manage** in the **Withdrawal** screen.
2. Give the address a name and copy the address in and save it under **Manage**.
3. Kraken will send you an email about this new address added. Which you need to confirm to make sure that you added this address and not somebody else who tries to steal your ADA.
4. Next select the confirmed address from the selection list and give in the amount of ADA you like to withdraw. We advise you to make a test transaction with 1 ADA first to make sure it arrives in your wallet.
5. Once you have received this 1 ADA minus exchange fees in your Daedalus Shelley Mainnet Wallet. You can go ahead and withdraw the rest. Following this process ensures that you are not losing all your ADA in case of a mistake. Please follow this procedure, not only now but also in the future.

your wallet back to the exchange, the process is similar only the other way around.

In your wallet choose **Send**, give in the address from the exchange which you can find under **Fund ADA** and **Receive**. Again the same procedure is applicable, send a small amount first and verify it ends up at the exchange, before sending the full amount.

This guide was written on basis of Shelley Haskell Testnet 2 (HTN2) or Daedalus Shelley Testnet wallet v3 that makes use of a faucet.

In case of Shelley Mainnet Candidate 3 (MC3) you should restore your Shelley Mainnet Byron wallet on basis of your passphrase in the Daedalus 1.5.1-STN Shelley Testnet wallet to be able to delegate to a stake pool. Make sure you use the correct Daedalus Testnet Wallet with MC3, at the moment of writing this document a first version is available but not yet for public download - Daedalus-1.5.1-STN4-Shelley-Testnet.

In one of our upcoming blog articles we will describe how you can restore a Mainnet Byron wallet on basis of its passphrase in a Daedalus Shelley Testnet wallet. Please subscribe to one of our social media channels to keep yourself informed about our upcoming blog posts.

As ADA4PROFIT we hope you enjoyed this guide about how you can reserve your stake in the **"operating system of the future"** Cardano.

In case you need help please contact us, we would be glad to help you and of course we would like to take care of your personal ADA via our stake pools JUNO (ticker **A4PEU**) or SATURN (ticker **A4PUS**).

Make a small withdrawal to avoid loss of your ADA because of a mistake

In case you want to send ADA from