Mosaic Galaxy

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Mosaic
Validator

Onboarding Guide

ENG

Mosaic Validator Onboarding Guide

This document will guide you through the steps of the validator onboarding process. **Please read this guide carefully before starting** the onboarding process.

The aim of the onboarding process is to connect your Special validator NFT to your validator node machine. As the essence of the blockchain is that there is no central server and central system-administrator, the transactions made cannot be reverted! Therefore **you are solely responsible for any loss if you do not strictly follow this document's guidance to the onboarding process.**

whole process consists of three parts:

1. Installing the Validator OS to the validator node machine (see in separate guide)
2. Minting the Special Validator NFT to a SubWallet account from the Weboffice
3. Connecting and binding the Special NFT to the validator node in the Mosaic Explorer

! This guide walks you through the onboarding process on a laptop or desktop computer. If you would like to go through the process on your phone and a mobile wallet, that is slightly different, you'll find the necessary information at the end.

I. Weboffice

In this part of the Onboarding Process you will start the minting of your Special validator NFT on the Mosaic chain. This means that a validator NFT will be created on the chain with a remark that it belongs to your given account.

Login to your Novalus Weboffice.
For your safety the two Factor Authentication is highly recommended, if you have not set it up yet, you are encouraged to do it now.

1. Making Declaration in the Weboffice

In the main Menu, select OnBoarding / Validators.
Here you will see a warning, read it carefully! Also click on the 'Validator NFT guide' button and read the guide that opens in a new window. (This guide.)
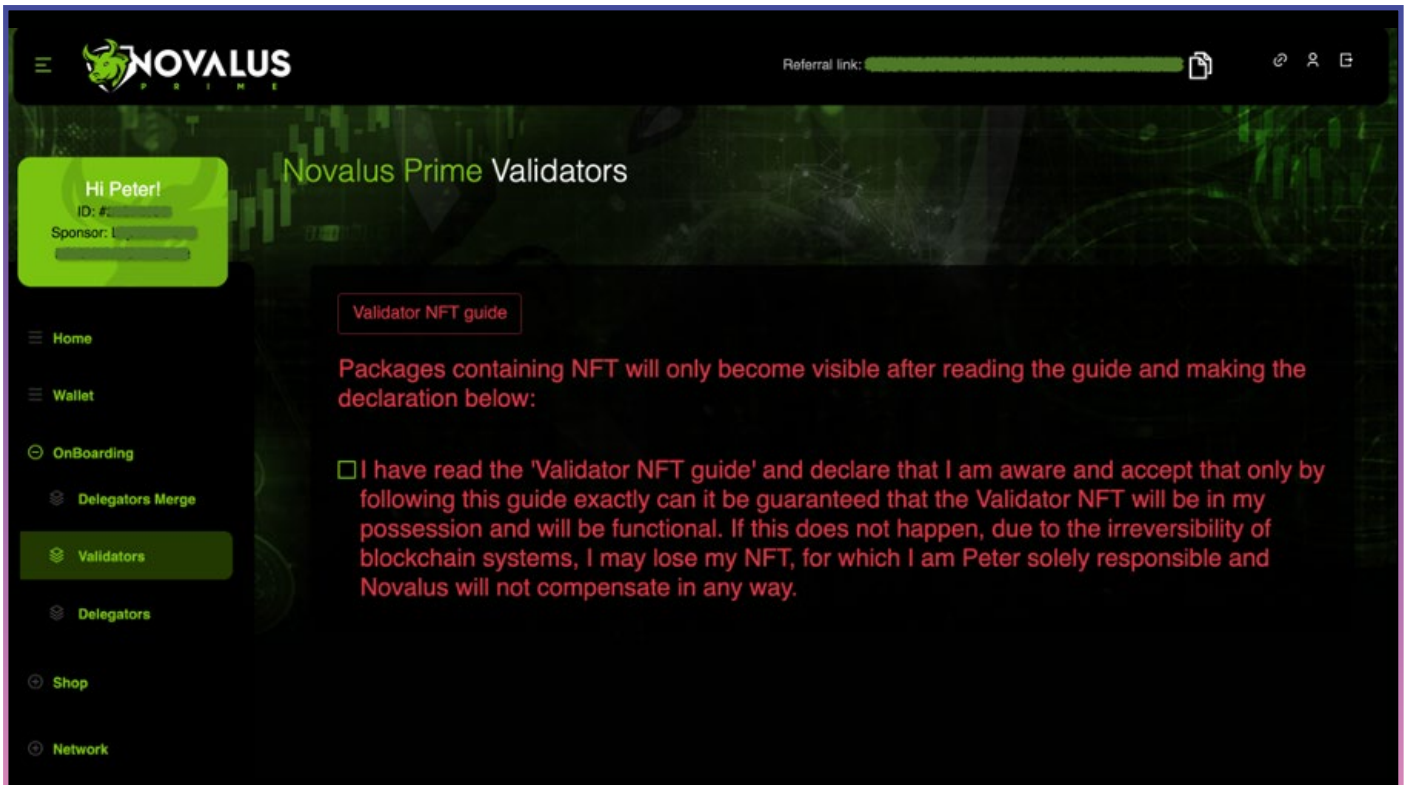
After you read the guide, check the checkbox next to the statement, click on the appearing button. A window will show up, after reading the text in it, click on 'I accept it' if you agree with it. You will still have access to the guide after accepting the statement.
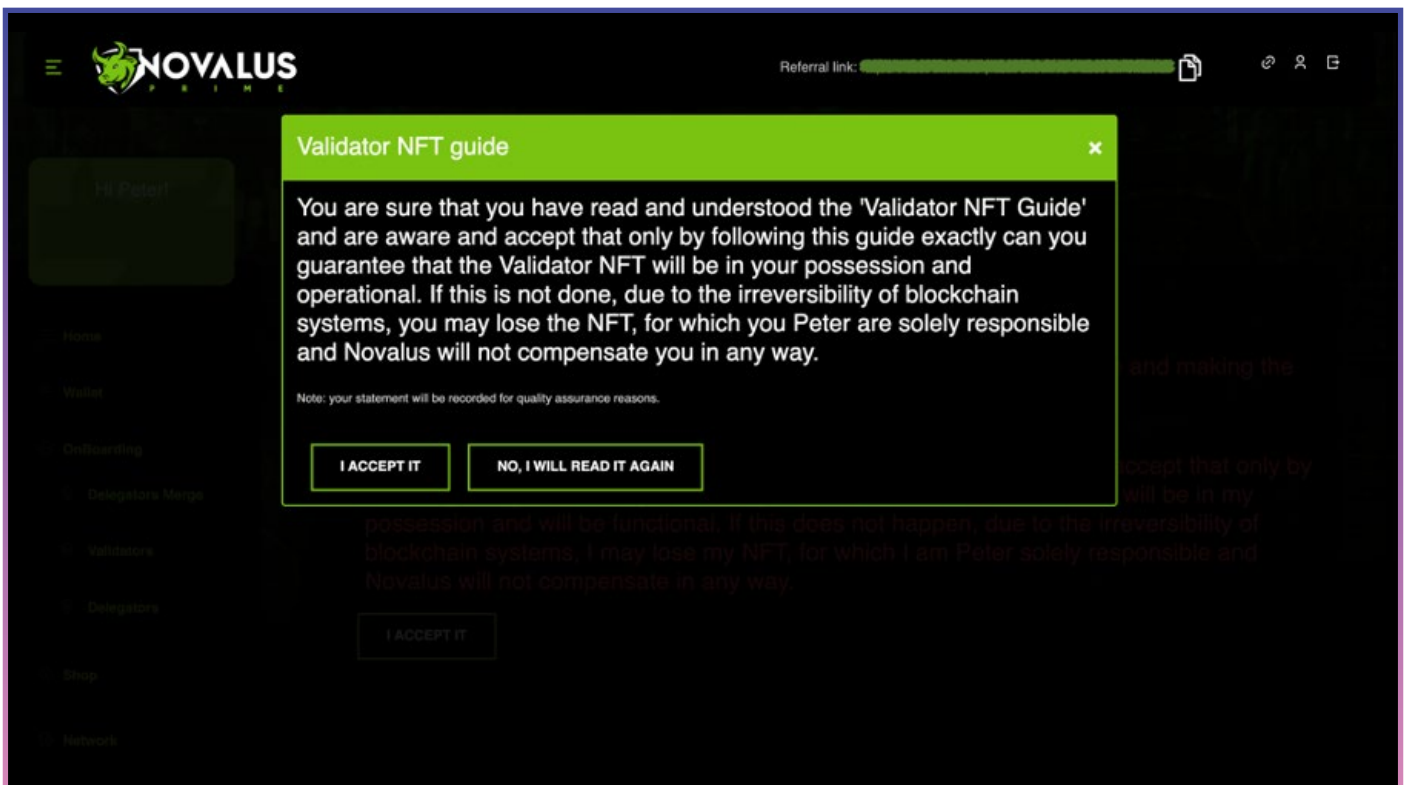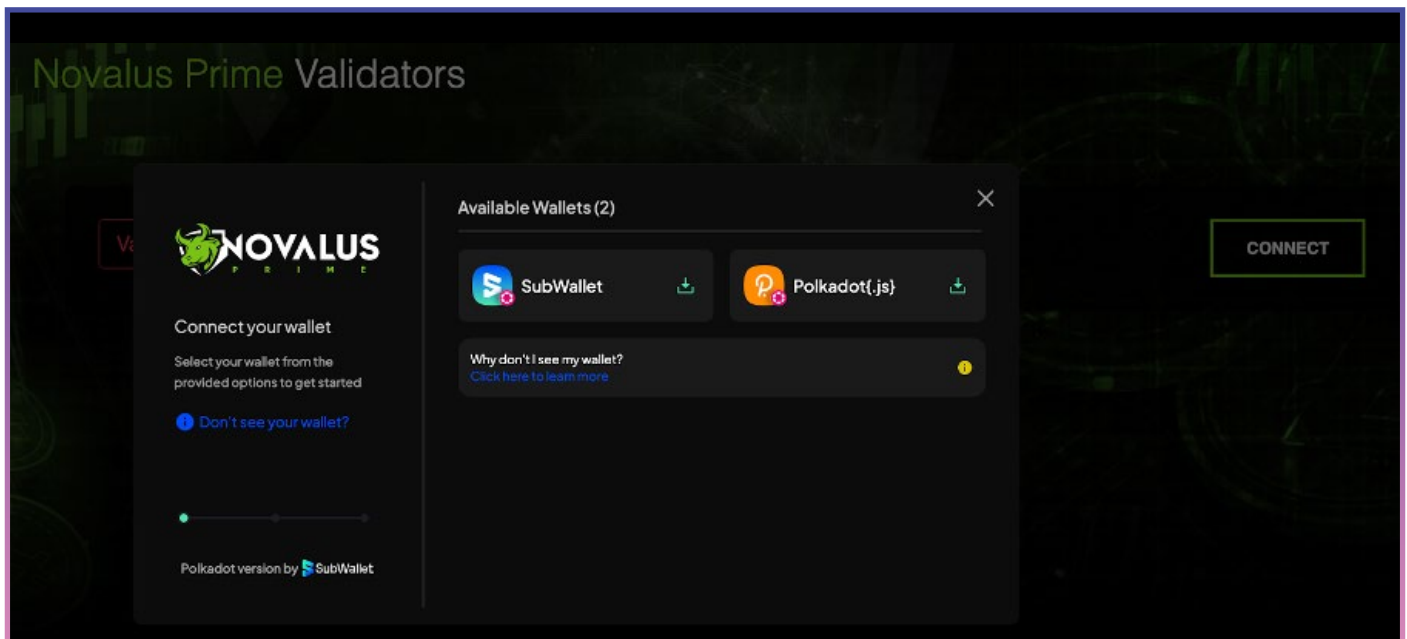
2. Connecting SubWallet wallet to your weboffice

In order to transfer your NFT from the weboffice to the Mosaic chain, you need to connect a substrate based wallet account.

Click on the CONNECT button on the Onboarding / Validators page.
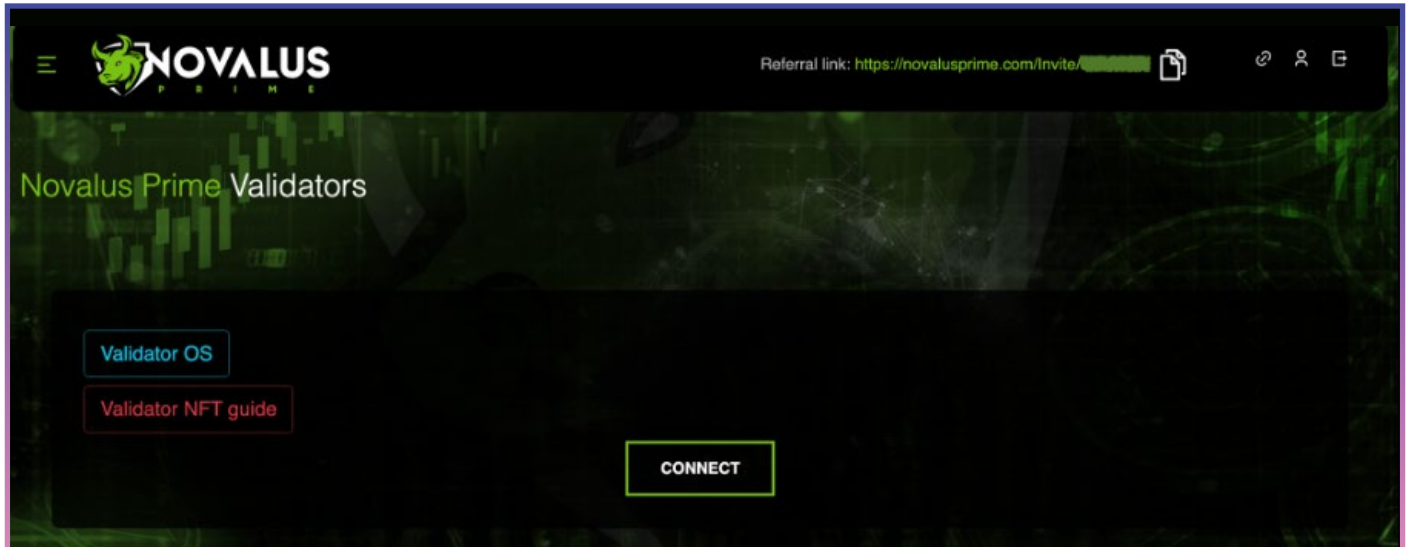
A modal will show up with the possible wallet providers.

2.1. Installing SubWallet on your device

If you have already installed SubWallet on your device go to step 2.2.
Click on the SubWallet button on the modal, it will guide you to the subwallet page where you can download the app.
At **https://www.subwallet.app/download.html** you can find different download links for different browsers. Choose what suits your usage best. You have to install the wallet to the device and browser that you are using for reaching the Weboffice and later the Mosaic Explorer.
You can find detailed installation guide here:

https://docs.subwallet.app/main/extension-user-guide/getting-started

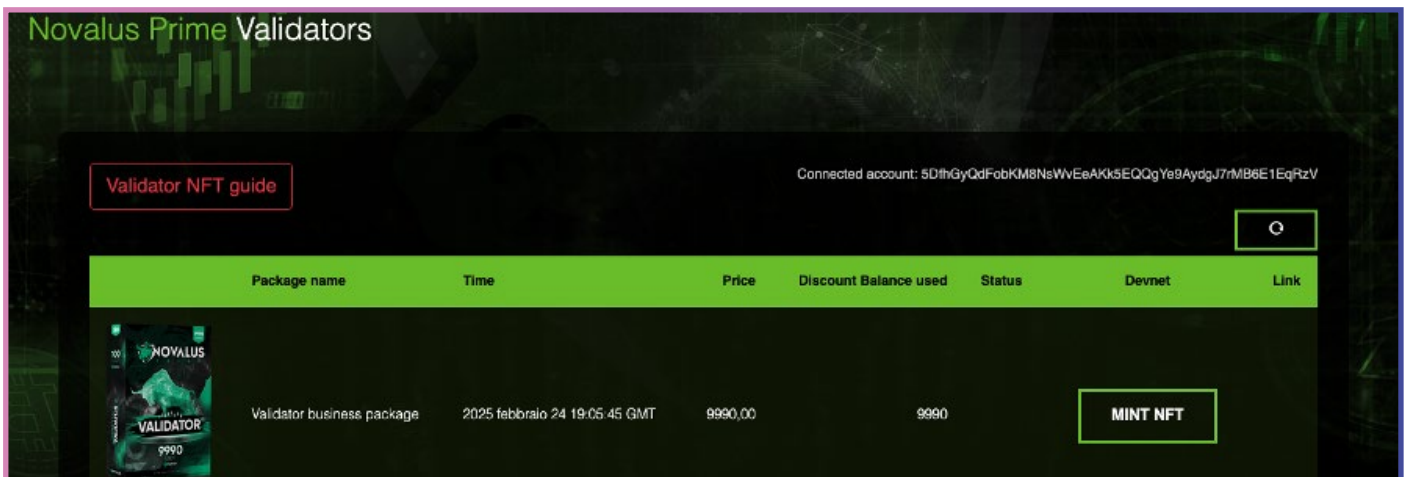If you do not have a Substrate account yet, create a new one in SubWallet.
You can find a detailed guide for creating new account here:
https://docs.subwallet.app/main/extension-user-guide/account-management/create-a-new-account-with-a-new-seed-phrase

It is VERY IMPORTANT that you keep your seed phrase of this account in a safe place. If you ever forget it or lose it, you will not be able to recover your account if needed! If you forget the password to the SubWallet extension or your device breaks down, and you don't have your account's seed phrase, you will not be able to access your account anymore! All your assets on it will be unreachable to you!
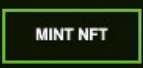
2.2. SubWallet already installed

If you have SubWallet already installed on your device, click on SubWallet in the modal, this will initiate the SubWallet extension to ask your permission for connecting to this site. In the popping SubWallet window choose the account you would like to use (if you have only one, you have to select that), and click on Connect. If you would like to connect all your accounts later, you can select all accounts in the SubWallet app, then later you can choose between them in the weboffice. After clicking on Connect, your account will be connected to the weboffice, you can see the account address in place of the 'CONNECT' button, and you can see your validator NFT(s).

2.3. Connecting another wallet or account

After connecting your wallet, in the bottom right corner you will see a button with the Novalus logo and the SubWallet logo on it. By clicking on it, the wallet menu appears. Here you can choose to connect another wallet or disconnect all wallets. If you have more accounts in your wallet but at step 2.1. you only allowed one to be connected, you will need to set the connection status of the other accounts in the SubWallet extension.
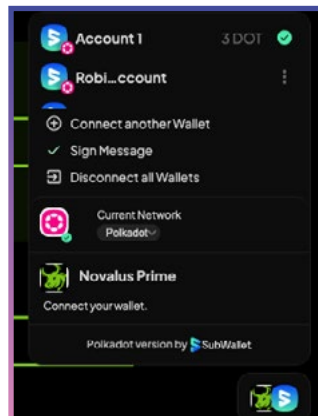

3. Minting NFT to your substrate account

You can see your Validator NFT(s) on the list. If you have more than one, be aware that you can mint only 1 Special Validator NFT on a wallet account. You will need more accounts for more NFTs.

Click on the MINT NFT button next to your Special Validator NFT.
In the popping window check the details thoroughly. After confirming this step there is no possibility of withdrawal or cancellation!

Check the selected wallet account address before clicking on ACCEPT.
If you have made sure that the data is correct, click on ACCEPT.
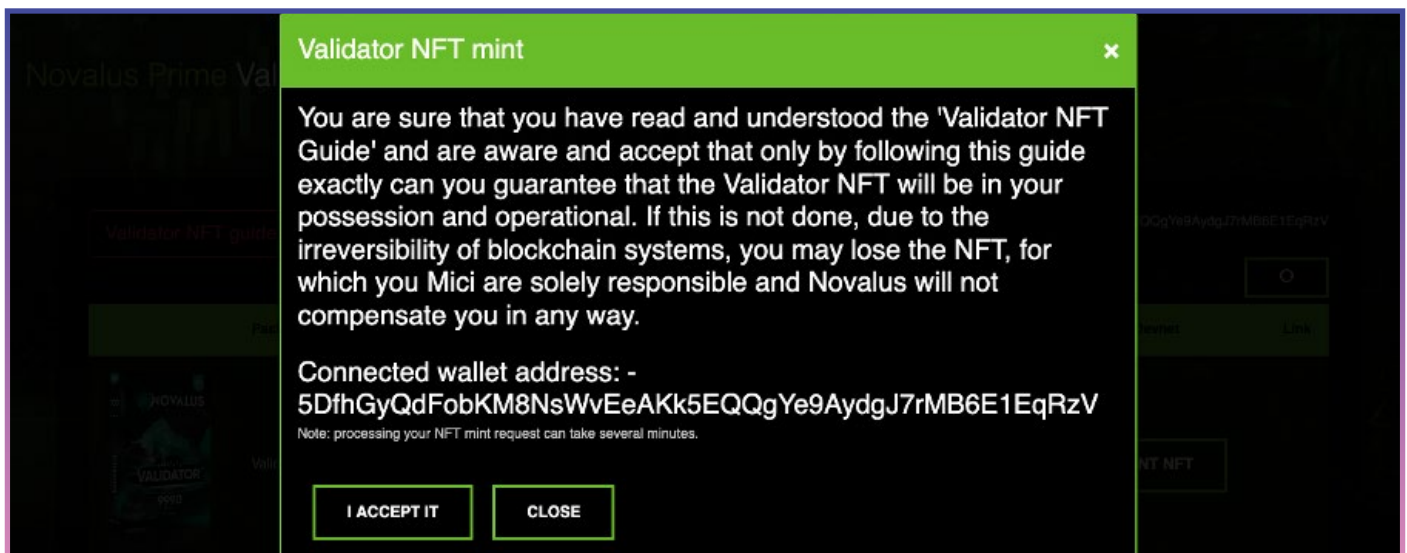
4. Sign with wallet

The SubWallet extension window will pop up asking your signature to approve the transaction request. **Check the details by pressing view details, wallet provider's are trustable, but make it a habit that you always check what you are about to sign!**
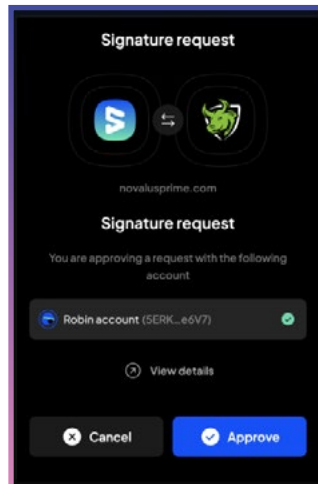
If you checked what the wallet asks your signature for is really what you want, click on Approve. After approval, SubWallet returns you to the Weboffice screen.
Now you have to wait a bit until the transaction is finalized on the chain.
If the transaction succeeded, you will see it in the list (maybe you need to click the refresh button at the top of the table):

5. Adding network (chain) to wallet (optional)

You can see your account's details and assets on the Mosaic Explorer. To see your MOS balance in the SubWallet you need to add the network manually to the SubWallet.
You can follow the instructions provided at the link below. The url of the network, what you need to provide: wss://devnet-gw1.mosaicchain.io/MosaicNode1/chain

https://docs.subwallet.app/main/extension-user-guide/network-management/customize-your-networks/import-custom-networks

II. Mosaic Explorer Admin Felület

To proceed with this step you need your validator node machine already installed and registered in the VPN network, with a completed chain synchronization process.
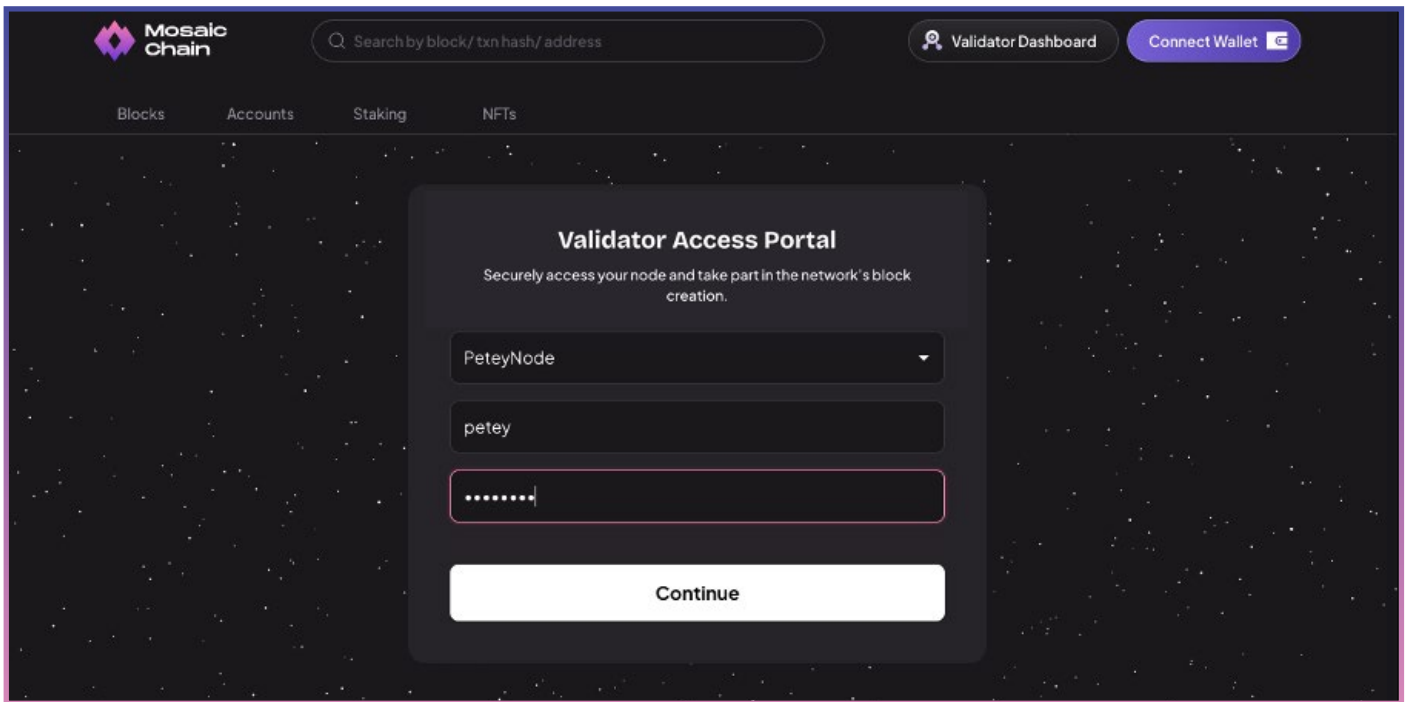
1. Sign in to your Admin Dashboard on Mosaic Explorer
Go to **https://devnet-gw1.mosaicchain.io/** in the same browser you have installed your wallet.
To sign in as a Validator Node Admin, click on the 'Validator Dashboard' button in the top right corner of the screen.
In the login form, at the first field you can select your node if you are connected to a different one. From the dropdown, select your validator node, look for the name that you have provided during the Mosaic Validator OS installation and registration process.
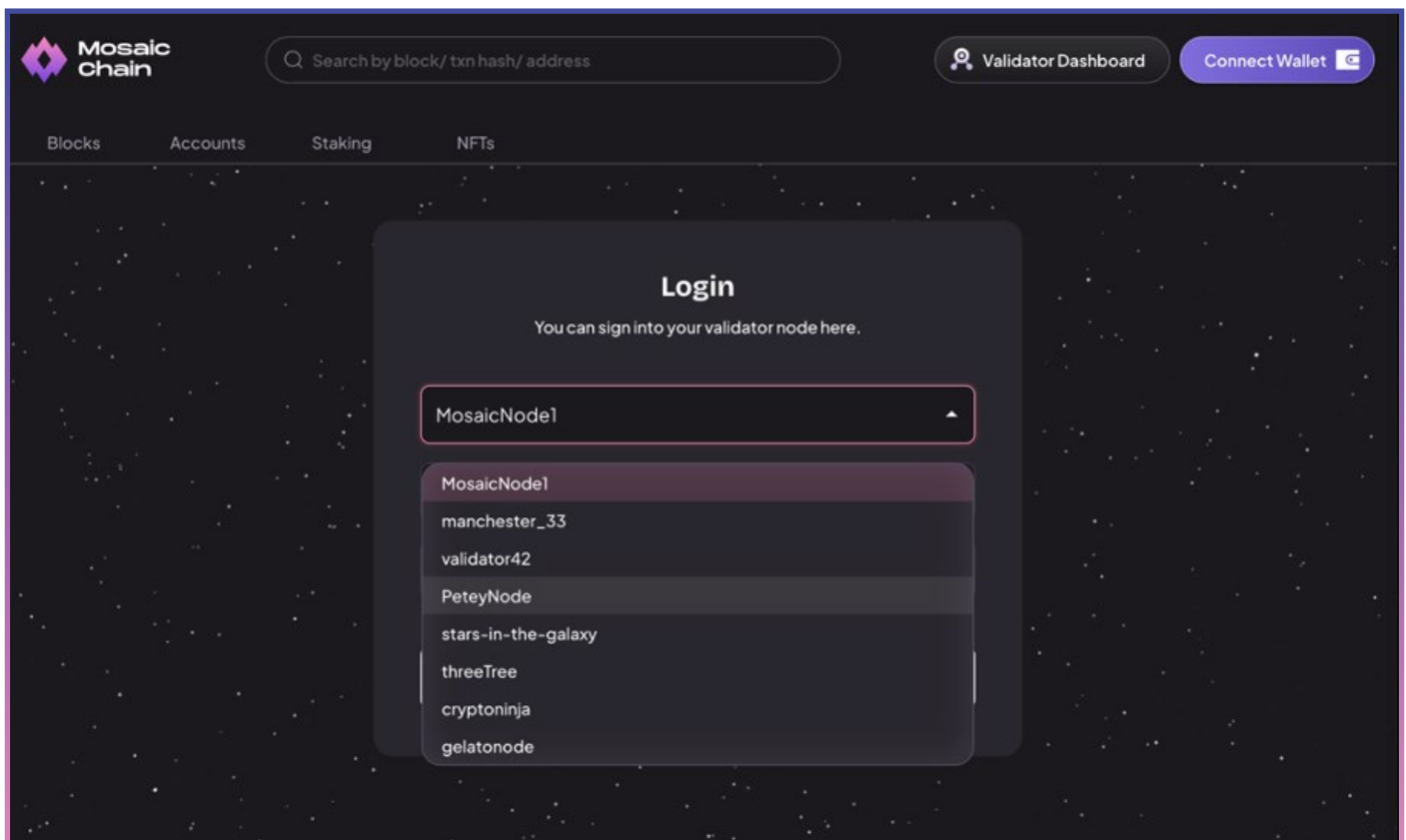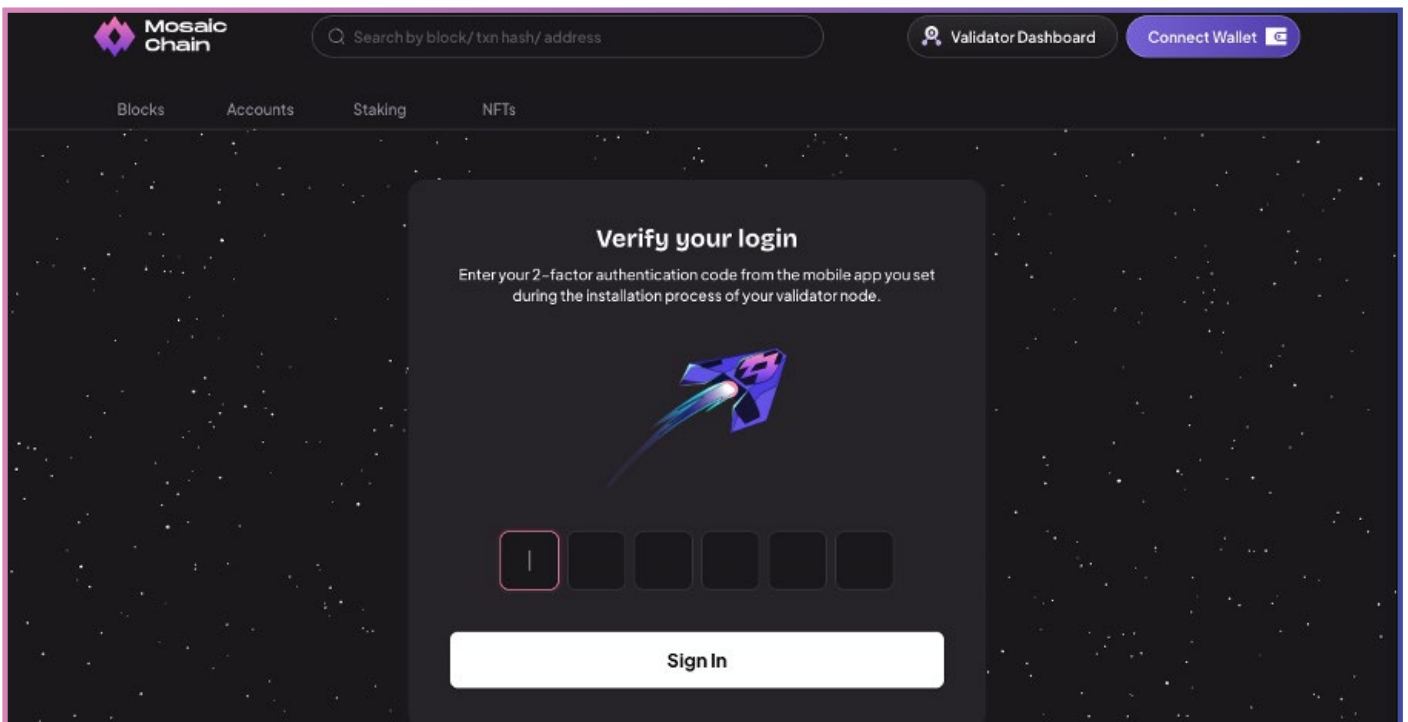
When you have selected your node, the connection switches to that. Please type in your username and password that you have provided during the Mosaic Validator OS installation, it is the username and password to your validator machine.

After this you have to provide the code for your two-factor authentication. This is what you have set up during the Mosaic Validator OS installation by taking a photo of the QR code with the authenticator app.Open your authenticator app and check the code for your validator node and type it in.

If you have provided the right credentials you will be signed in to your validator node's admin dashboard. If you mistyped anything, you will get an error telling you where your mistake was (username and password or the 2FA code), and you can try again.

If your validator node has not completed the blockchain synchronization yet, you will see a screen that shows the status of this process. You can not continue until synchronization is complete.
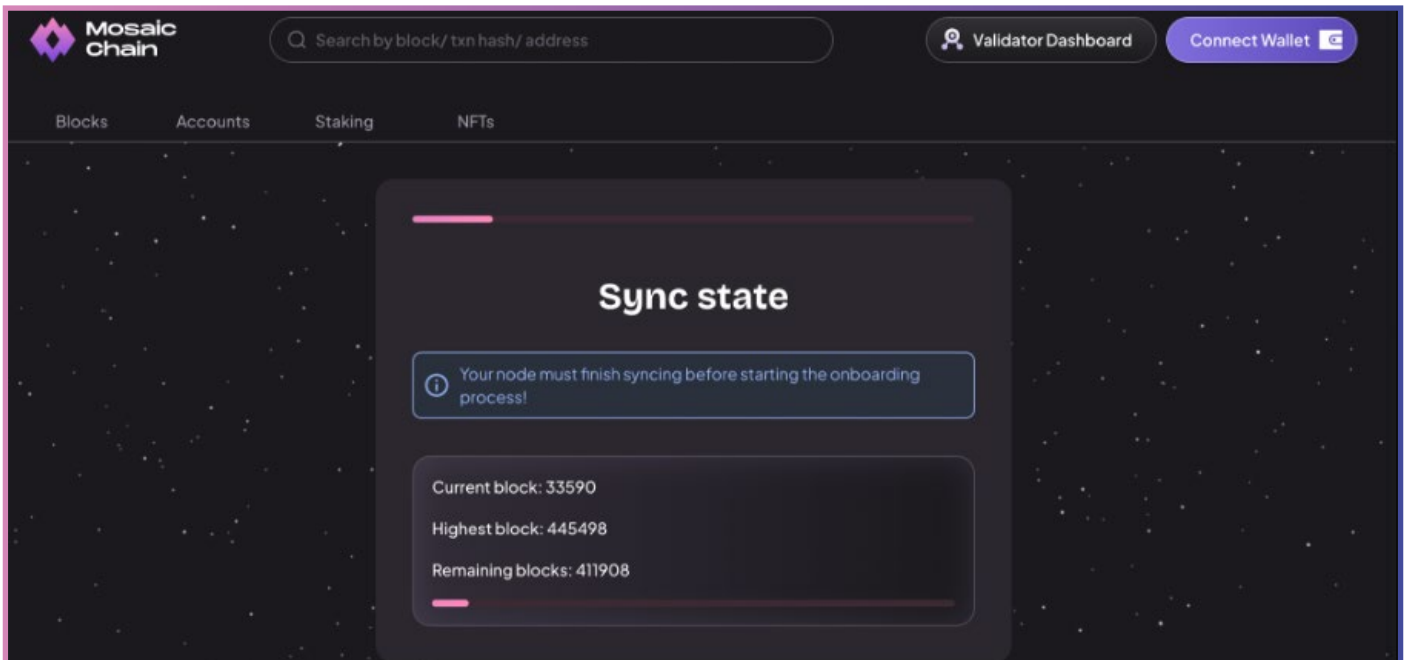
2. Connect wallet

At the first login to your Admin Dashboard, the Onboarding Process comes up as default if your Special Validator NFT is not bound yet to your validator node.
Click on 'Connect wallet' on the welcome screen.
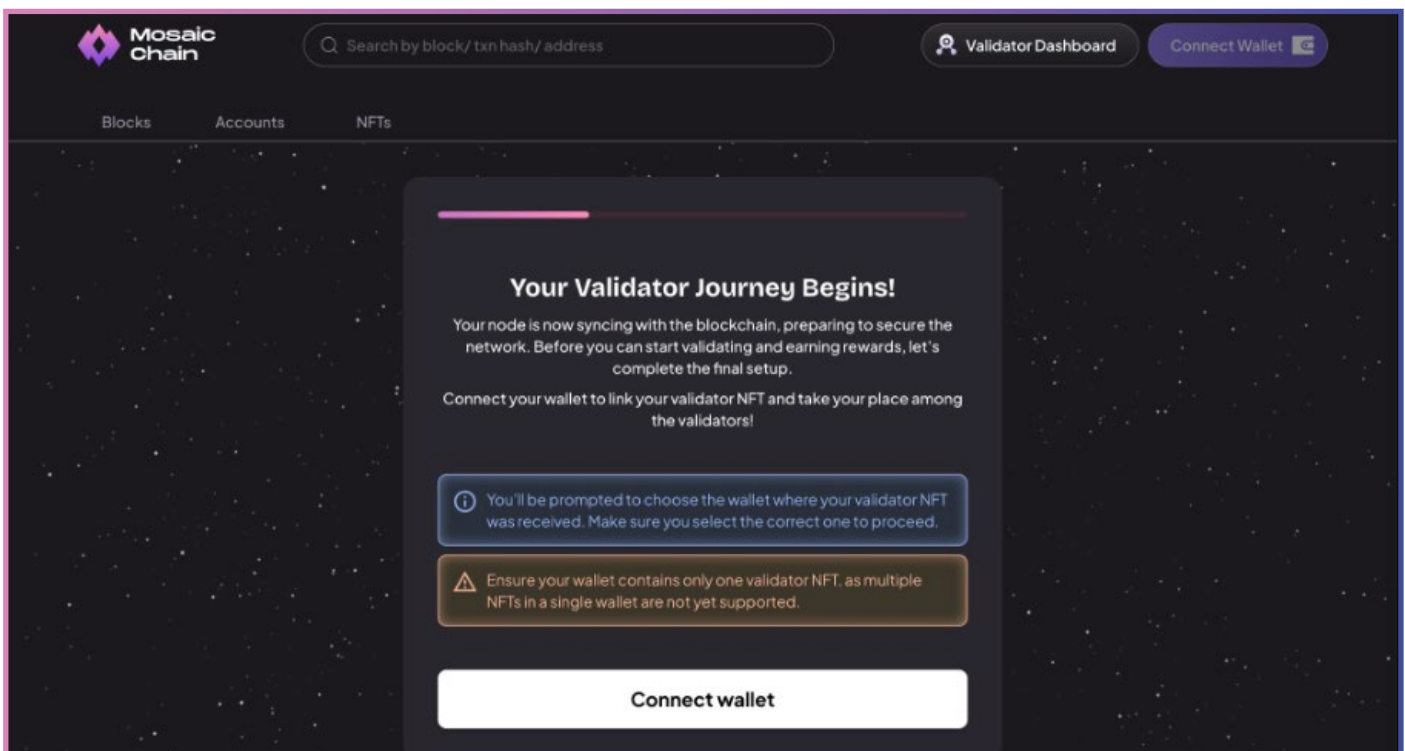
Here you can choose your wallet provider, as SubWallet was suggested in the weboffice part, choose SubWallet.
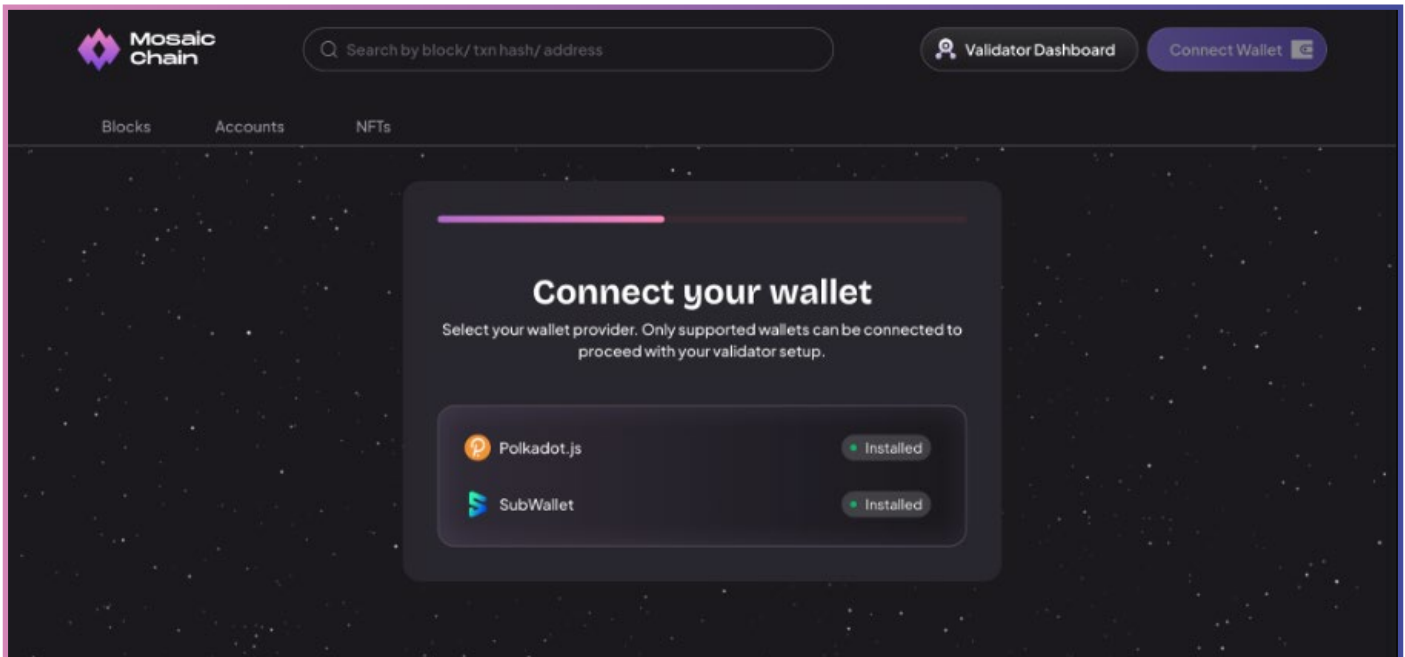
This will initiate the SubWallet to ask your permission for connecting to this site. In the popping window choose the account you would like to use (if you have only one, you have to select that), and click on Connect. If you have more accounts, you can select 'All accounts', then you can switch between accounts later directly in the Explorer.
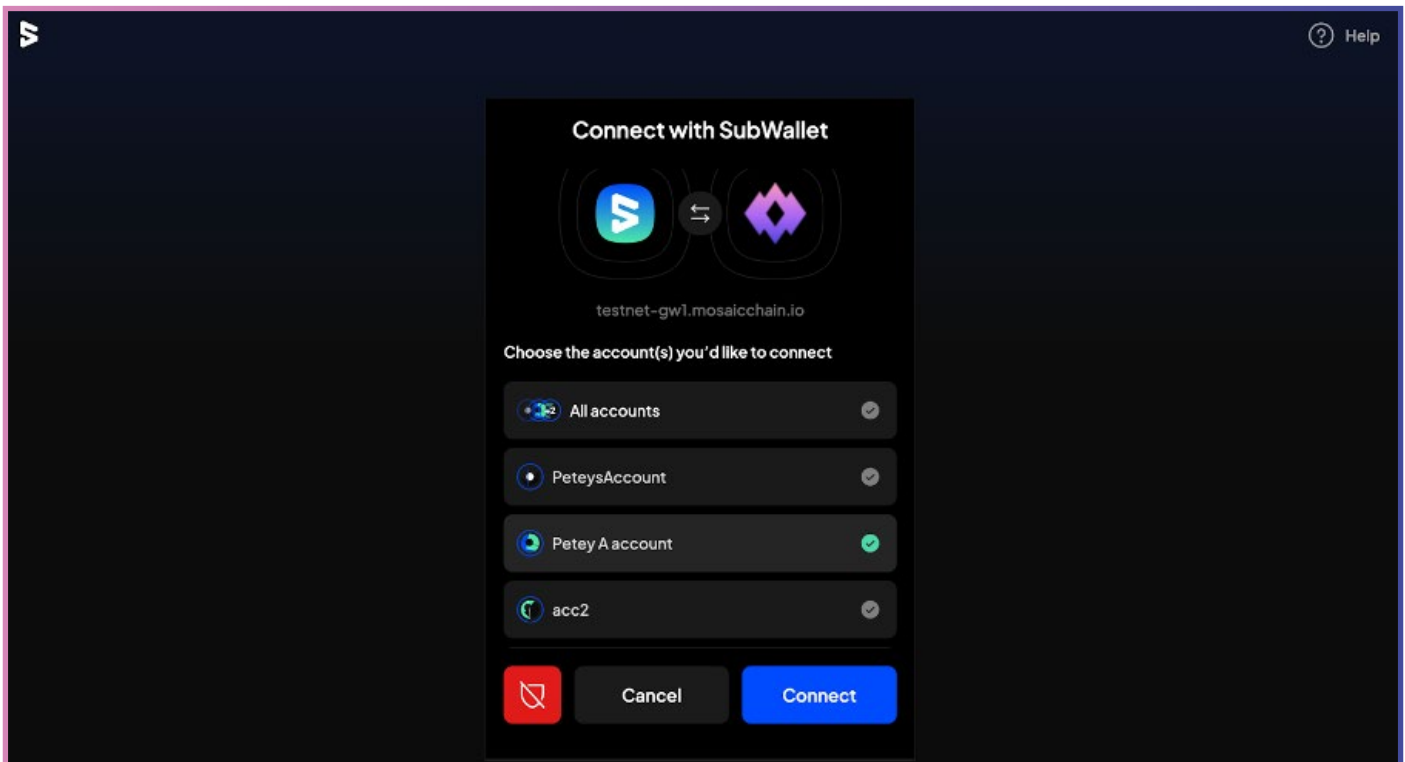
If you connect only one account from multiple accounts in this SubWallet window, you can change it later only directly in the settings of SubWallet, there is no possibility to approve other accounts in your wallet provider from the Explorer.
Also if you click on the Reject button here (the red button with a shield), SubWallet will remember this setting and you can only change it later directly in the settings in SubWallet, the Explorer will not have access to the wallet.
https://docs.subwallet.app/main/extension-user-guide/connect-dapps-and-manage-website-access#manage-websites-access

After approving the connection with SubWallet you are guided back to the Explorer where you can select your account. If there is only one, you need to click on it, too.

After selecting your account, it is connected to the Mosaic Explorer, you can see it in the top right corner as well. The onboarding process continues with the next screen.

3. Authorizing proxy wallet

To explain simply the technical background, the binding of the Special Validator NFT to your validator node machine consists of two parts. First you give permission (proxy) from your account that holds your Special Validator NFT to the validator node (which has the so-called controller account) to perform certain actions in connection with the Special Validator NFT that are needed for the validation process. Second you bind the Special Validator NFT, so it cannot be transferred or used elsewhere or burned.

When your account is connected, an automotive check is made on the account for Special Validator NFTs. You see the small circle spinning while the check is running.

When the check is finished you will see a check mark if there is a single Special Validator NFT on the connected wallet account. If there is no NFT or there are multiple NFTs you will see a red x and the corresponding message at this point.
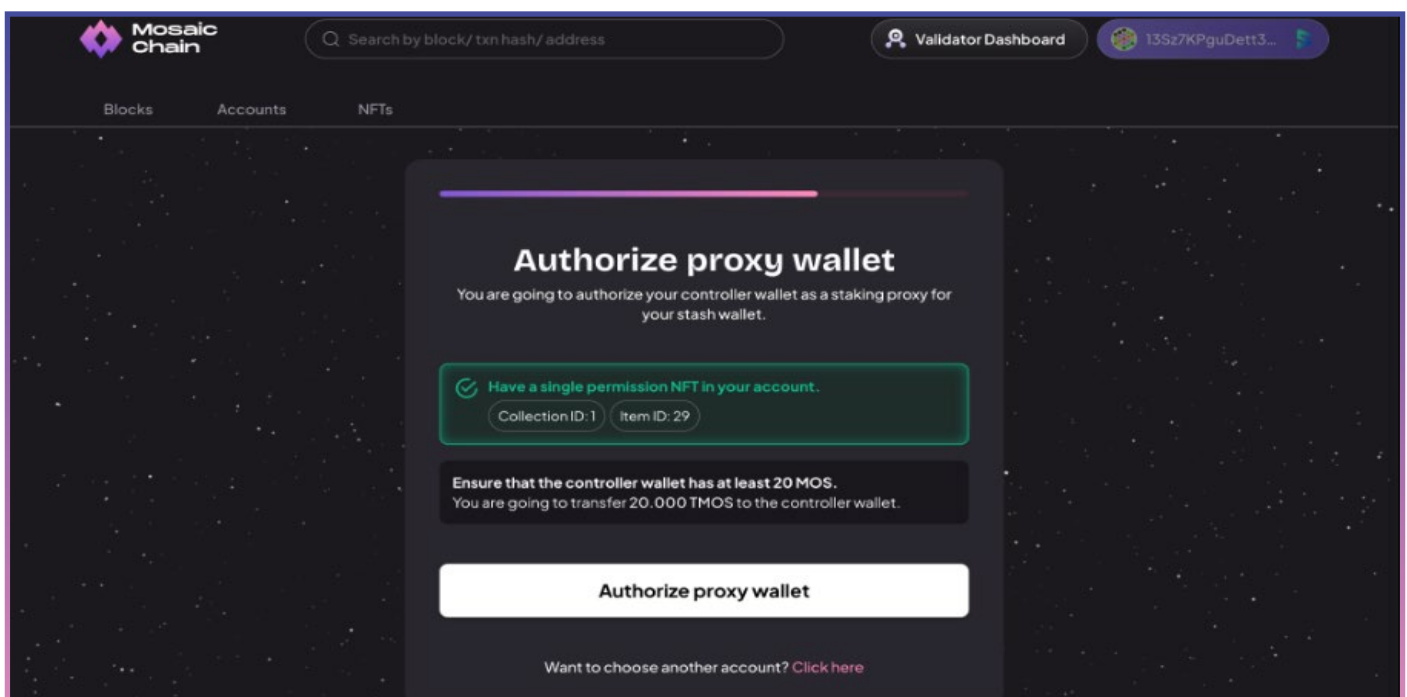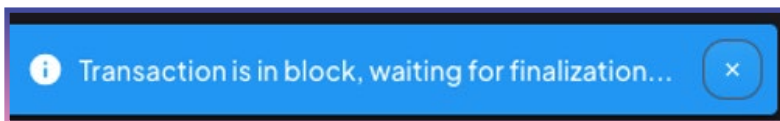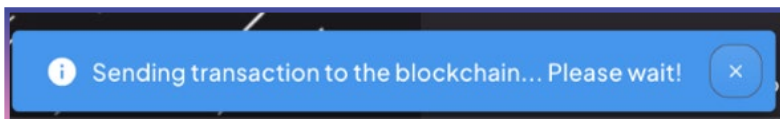
When the Special Validator NFT is found, the 'Authorize proxy wallet' button becomes active.

With the authorization 20 MOS will be transferred to the controller account for the small fees the controller account has to pay when it acts on behalf of the account that holds the Special Validator NFT (e.g. binding the NFT). (During the weboffice minting process, together with the validator NFT, 50 MOS was also credited to your account.)

Click on the 'Authorize proxy wallet' button to send the proxy transaction to the chain.

A SubWallet aláírási kérelme megjelenik. Ellenőrizd a részleteket és ha hibátlan, kattints az „Approve" (Jóváhagyás) gombra!

After you have signed (approved) the proxy transaction, you will see the transaction's progress on the blockchain in a blue message box in the bottom left corner of the screen. Finalization might take some seconds, just wait patiently.

When the transaction is finalized on the blockchain, that is your account authorized your validator node's controller account to be its proxy, one more verification is needed to store this account address with the Special Validator NFT on your validator node.
Open your two-factor authenticator app and check the code for your validator node and type it in.
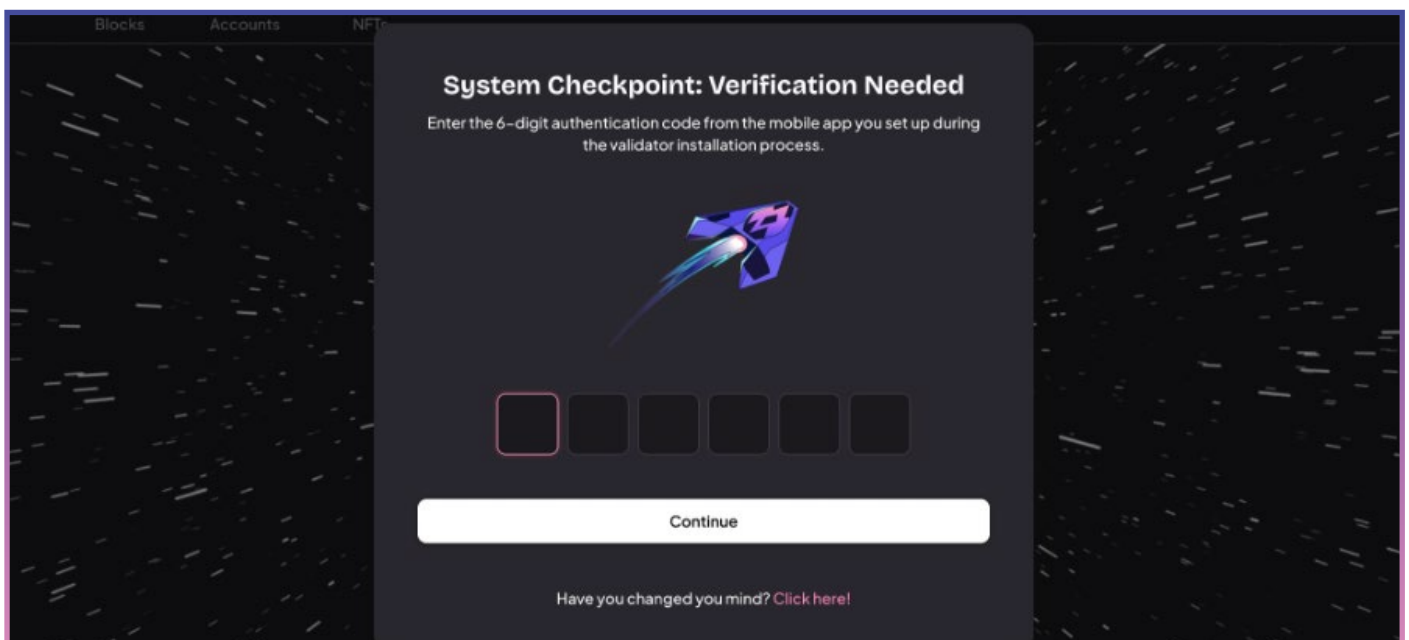
Now the account that holds your Special Validator NFT (stash account) has authorized the controller account on your machine as proxy. You only need to bind your Special Validator NFT to make your node start generating blocks and earn rewards.

Warning: If you have more than one validator node, do not try to authorize another node with the same stash account! If it succeeds then multiple nodes will propose blocks to your NFT in the slot you were drawn. **You will not receive more rewards, but you might be slashed (penalized).**

4. Bind your Special Validator NFT

To bind your NFT, you need to click on the 'Bind NFT' button to start the blockchain transaction.
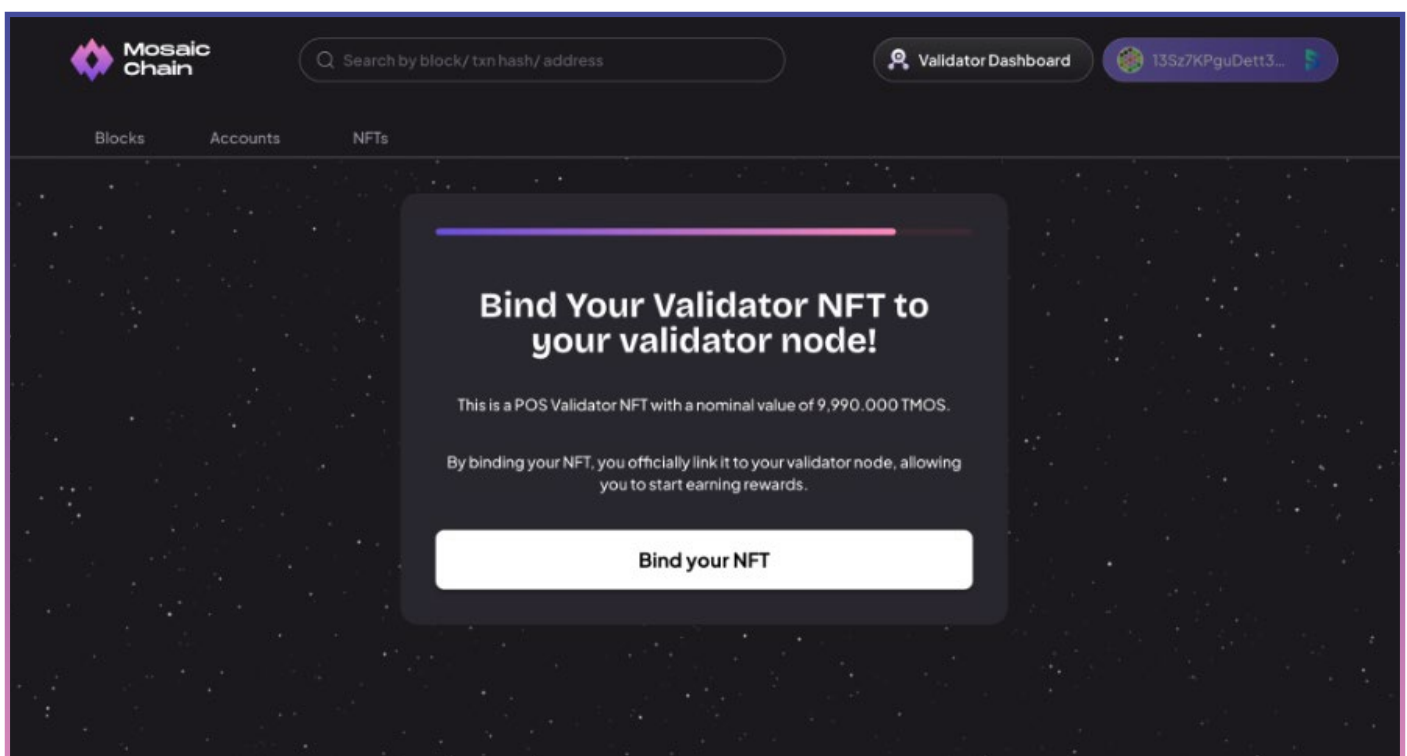
This transaction is initiated by your validator node now, therefore you have to provide your two-factor authentication code to approve it.
Open your two-factor authenticator app and check the code for your validator node and type it in and click on continue.

When the process is finished, a congrats screen will show. After clicking on continue on this screen you will see your validator admin dashboard.

Congratulations, your onboarding process is completed! Your validator is fully set up, the Mosaic Journey begins!

Your node is taking part in block generation and validation, if you need to turn it off, you have to chill it first to let the chain know it will not be available! You can give the chill command on the validator admin dashboard.

Onboarding on phone

The difference to the above onboarding process when doing it on a phone is the following.

1. Installing SubWallet to your phone

Download tha SubWallet app from the App Store or Google Play and install it.

Detailed instructions for installation:
https://docs.subwallet.app/main/mobile-app-user-guide/getting-started

If you do not have a Substrate account yet, create a new one in SubWallet.
You can find a detailed guide for creating new account here:
https://docs.subwallet.app/main/mobile-app-user-guide/account-management/create-a-new-account-with-new-seed-phrase

It is VERY IMPORTANT that you keep your seed phrase of this account in a safe place. If you ever forget it or lose it, you will not be able to recover your account if needed! If you forget the password to the SubWallet extension or your device breaks down, and you don't have your account's seed phrase, you will not be able to access your account anymore! All your assets on it will be unreachable to you!

2. Open the website in the SubWallet browser

The onboarding flow is the same as described above in the guide, only you have to access both the Weboffice and the Mosaic Explorer through SubWallet's browser.

On the SubWallet homepage, press the "dApps" tab at the bottom of the screen.
For the first phase of the process type in the search bar the address of the weboffice, novalusprime.com. Hit enter, and SubWallet connects to the site and you can complete the onboarding process according to what is written in the above guide for computer browsers.

For the second phase type in the search bar the address of the mosaic explorer, **devnet-gw1.mosaicchain.io.** Hit enter, and SubWallet connects to the site and you can complete the onboarding process according to what is written in the above guide for computer browsers.