MAINNET

Mosaic Galaxy

Validator NFT *Auction*

User Guide



ENG

Mosaic Chain Validator NFT Auction User Guide

Important Information and Risk Considerations. Please read these points before participating in an auction.

For sellers:

- Only **Not Bound** Validator NFTs can be offered for auction.
- Offering an NFT locks it. While listed, it cannot be transferred, bound, or used to operate a validator.
- Auction prices change over time and depend on the current Hype parameter and NFT nominal value.
- The NFT's nominal value is a protocol parameter and does not guarantee the NFT's market value or future resale price.
- You remain the owner of the NFT while it is listed.
- You must set a minimum selling price in MOS, that cannot be higher than the estimated ending price calculated with the current hype.
- Only one NFT is auctioned at a time. The pool can contain up to 50 NFTs.
- Your NFT is selected randomly from the auction pool. Repeated selection is possible.
- Listing does not guarantee a sale.
- Cancellation is subject to specific conditions. See Chapter 4.

For buyers:

- The auction price decreases over time, but another buyer may purchase the NFT before you.
- The maximum purchase price is displayed when initiating a purchase (as current price). You will not pay more than this limit.
- Payment and NFT transfer take place in one atomic blockchain transaction.
- Purchases are executed through blockchain transactions and are subject to network processing and finalization times.
- A failed transaction may still incur a transaction fee.

1. How does it work?

1.1. Dutch Auction

The Mosaic Chain NFT Auction platform allows users to buy and sell NFTs through a **Dutch Auction system.** In a traditional auction, buyers compete by placing increasingly higher bids.

In a Dutch Auction, the process is reversed:

1. The auction starts at a relatively high price.
2. The price gradually decreases over time.
3. Buyers can purchase the NFT at any moment at the currently displayed price.
4. The first successful purchase ends the auction, and ownership of the NFT is transferred to the buyer.

Each auction lasts 28,800 blocks, approximately three days. It can end earlier if someone purchases the NFT.

1.2. What is being sold?

This auction system is designed for **Validator (Permission) NFTs.**

A Validator NFT represents a base stake within the Mosaic Chain network and validator permissions that can be exercised by binding the NFT to a suitably configured validator node.

Each NFT is uniquely identifiable through its collection and serial number (ID).

Only NFTs with **Not Bound** status can be offered for auction.

The NFT remains owned by the seller while listed, but it is locked until the listing is resolved.

Important: Purchasing a Validator NFT does not automatically make the owner a Validator. To exercise the validator permissions, the NFT must be bound to a properly configured validator node.

1.3. Auction Lifecycle

The auction system operates through a shared pool of listed NFTs.

Only one NFT is actively auctioned at a time. Other listed NFTs remain in the pool until they are randomly selected.

The auction process follows these stages:

1. **Offer:** The owner submits an eligible NFT to the auction pool using the Offer function.
2. **Pool:** Once submitted, the NFT is listed in the auction pool and remains locked until it is sold, automatically rejected, or the listing is cancelled. The auction pool can contain a maximum of 50 NFTs simultaneously. If the pool is full, additional listing attempts will be rejected until capacity becomes available.
3. **Selection/Rotation:** One NFT is selected randomly for auction. A new item is selected once the previous one has been purchased or its time has expired.
4. **Active auction:** Once selected, the NFT enters the active auction phase. The starting and ending price parameters are captured at the moment of selection. The current price decreases linearly with each new block. Buyers can purchase the NFT at the displayed price. An active auction lasts for a maximum of 28,800 blocks (cca. 3 days).
5. **Ending:** The auction can end in one of the following ways:
    - **Sold:** A buyer purchases the NFT.
    - **Timeout:** The auction ends without a purchase, and the NFT returns to the pool.

Important: An expired NFT does not automatically return to its owner. It returns to the auction pool and may be selected again.

1.4. Auction Price Calculation – Understanding Hype

The auction price depends on three factors:

- The NFT's nominal value.
- The current Hype value.
- The maximum and minimum Hype multipliers.

Hype calculation

Hype reflects how quickly NFTs are purchased in previous auctions.

After each auction, the system calculates a new Hype value using a weighted moving average:

Updated Hype = 0.5 × Previous Hype + 0.5 × Period Hype

The period Hype depends on how much of the active auction period elapsed before the NFT was sold. A quick sale results in a higher period Hype value. An auction that reaches its timeout results in the minimum period Hype value.

The configured Hype limits are:

- Maximum Hype: **5.0**
- Minimum Hype: **0.7**

The Hype parameter influences the starting and ending prices of subsequent auctions. A higher Hype means that future NFTs start at higher prices and also have higher ending prices. A lower Hype shifts the entire auction price range downward.

Starting and ending price

The starting and ending prices are calculated as follows:

Starting price = Maximum Hype × Current Hype × Nominal value
Ending price = Minimum Hype × Current Hype × Nominal value

The price decreases linearly from the starting price towards the ending price throughout the auction period. The Hype value used for an active auction is fixed when the NFT is selected. This ensures that the starting price, ending price, and price progression remain consistent throughout that particular auction.

The actual purchase price depends on the moment at which the buyer completes the purchase.

Example:

For an NFT with a nominal value of 10,000 MOS and a current Hype of 1.0:

- Starting price: **50,000 MOS (5.0 x 1.0 x 10,000)**
- Ending price: **7,000 MOS (0.7 x 1.0 x 10,000)**
- Price after 35% of the auction duration: **34,950 MOS**

2. Buying an NFT

A buyer can purchase an NFT at any time during an active auction.

The price decreases automatically, so the buyer decides whether to purchase immediately or wait for a lower price. However, another buyer may purchase the NFT first.

Payment and NFT ownership transfer happen in one atomic blockchain transaction. If the transaction fails, the payment and ownership transfer do not take place, although a transaction fee may still apply.

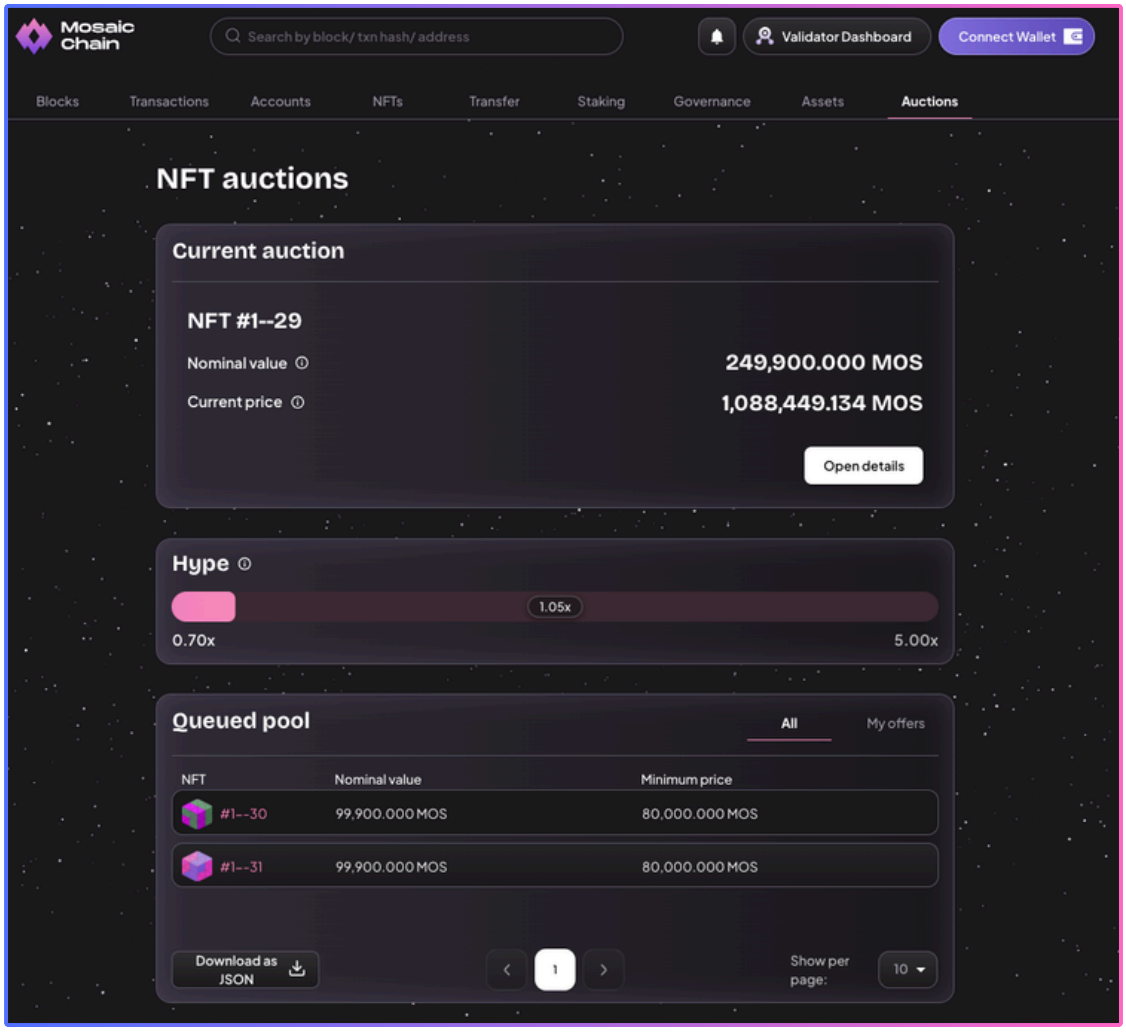
Purchase finalization typically takes 10–30 seconds.

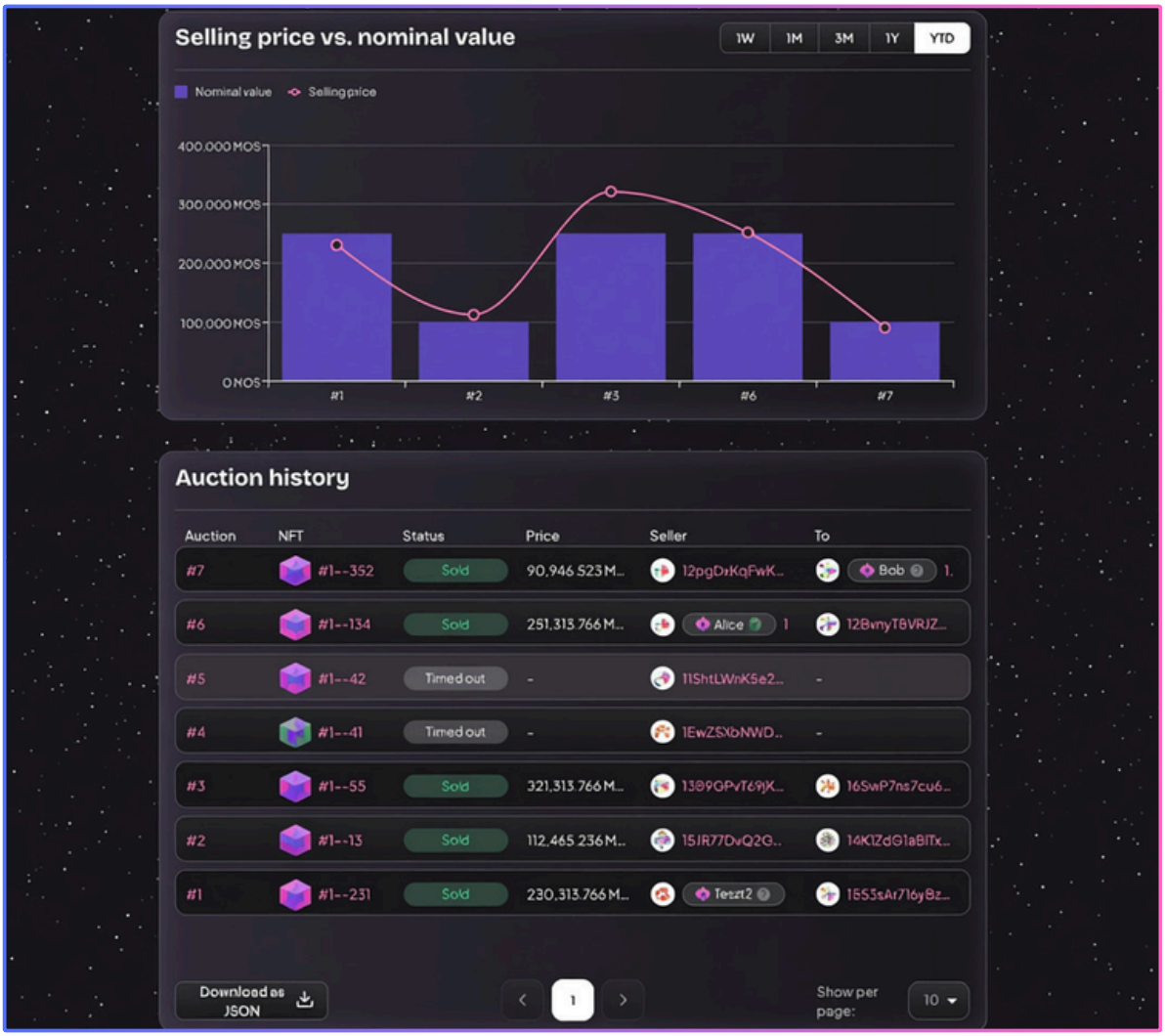
Steps

On to the Mosaic Chain Explorer open the Auctions page:

https://explorer.mosaicchain.io/auctions

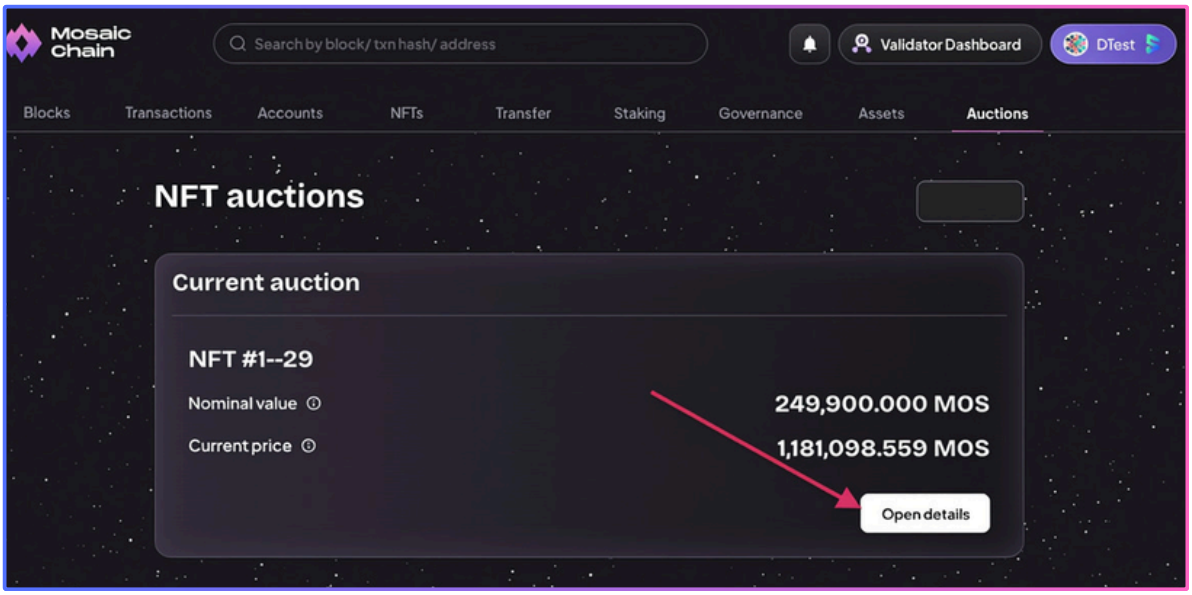
On the Auction page you can see the current auction, the current Hype value, the NFTs listed for auction (Queued pool), a chart about the selling price of completed auctions, and an Auction history summary.





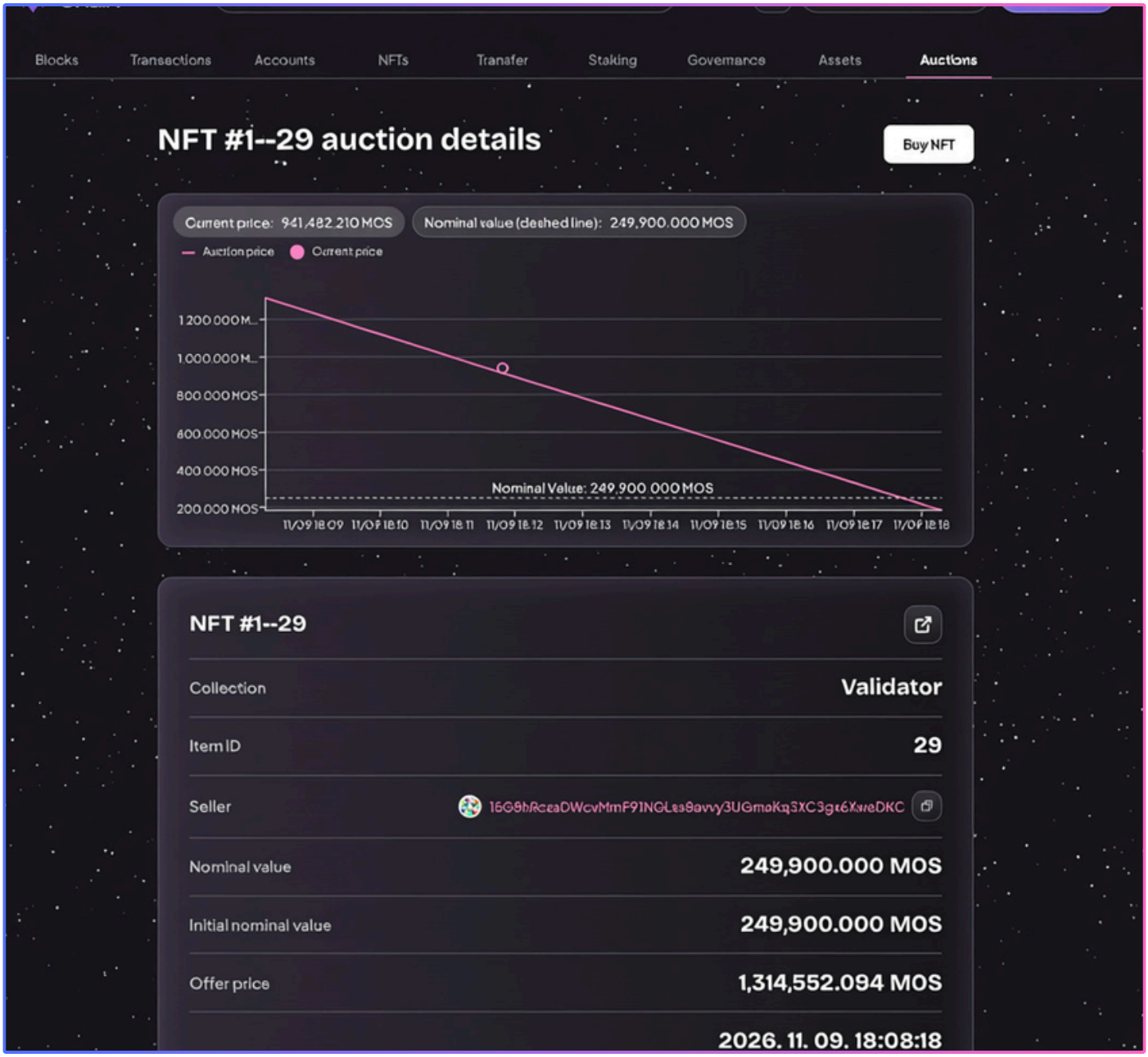
Connect your wallet with the Connect wallet button. Choose the account you want to use for the purchase.

On the Current auction card click the Open details button.



The Auction Details page opens, where you can see the status of the current auction. On the line chart a dot shows the current price, which is changing with every block between the starting price and the end price.

Under the price chart you can see the details of the NFT on auction.



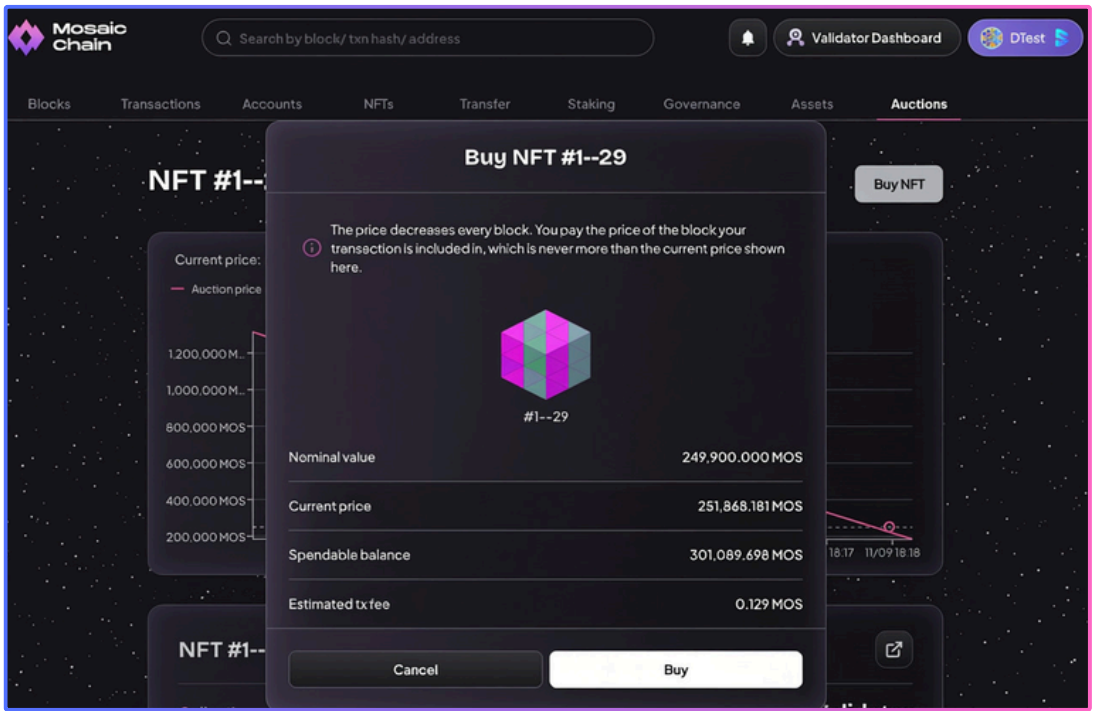
Make sure you understand which NFT you are purchasing and check its details before proceeding.

You can decide when to purchase the NFT based on the displayed current price.

Remember: Other buyers may purchase the NFT before the price decreases further.

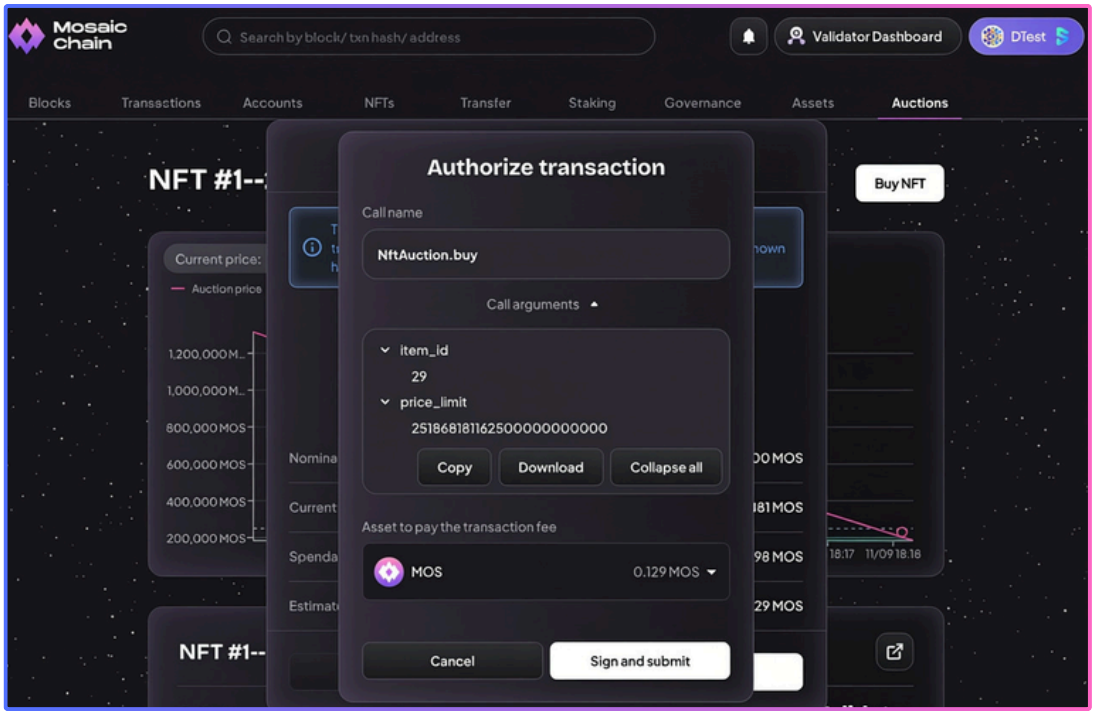
If you wish to buy the NFT and the current price matches your expectations, click on the **Buy NFT** button on the top right.

In the opening modal, review the details of the purchase. It is important to note that the shown current price is the maximum price you will pay, by the time the transaction gets executed it probably will decrease slightly.

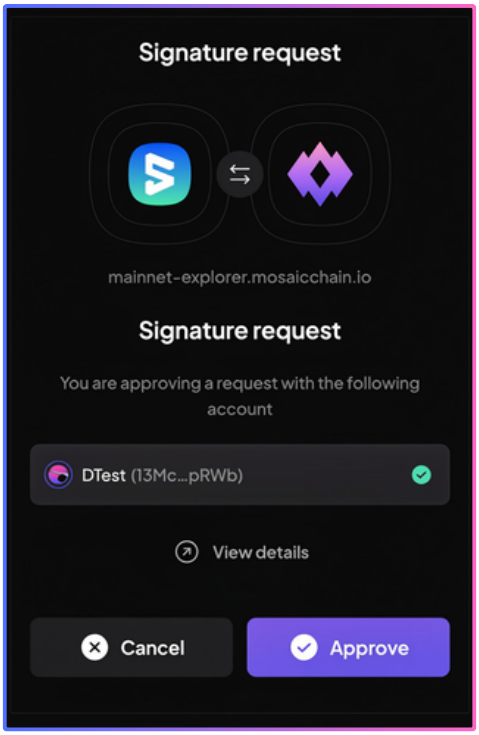


If you have checked the details click the **Buy** button.

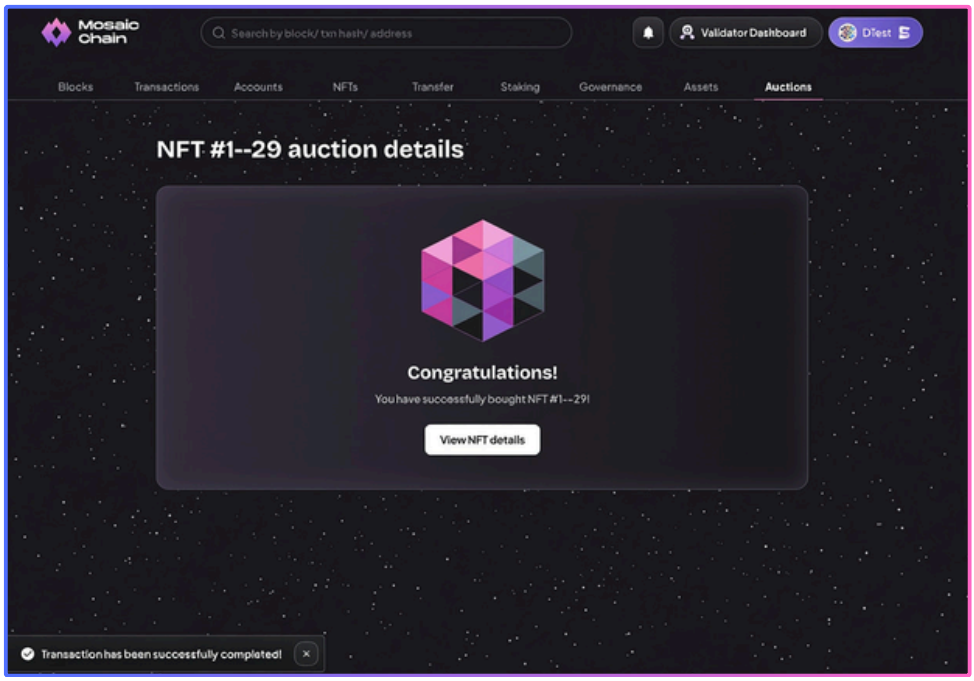
In the upcoming version of the UI an Authorize transaction modal comes up where you can select the asset in which to pay the transaction fee and review the details of the call being submitted. Click on Sign and submit.



The wallet provider's window appears. Check the details and approve the transaction.



The transaction gets into a block and will be finalized in 10-30 seconds.
With a successful transaction, the NFT is transferred to your account and the price of the NFT is transferred to the Seller's account in one step.



If the transaction fails, ownership will not change and the purchase price will not be deducted, although transaction fees may still apply.

Important: If multiple buyers attempt to purchase the same NFT, the first valid transaction included in a block wins. Subsequent attempts will fail because the NFT is no longer available.

3. Selling an NFT

Requirements and restrictions

- Only Not Bound Validator NFTs can be offered.
- The NFT becomes locked for the duration of the listing: it cannot be transferred, bound, or used to operate a validator while listed.
- Selection is random, and only one NFT is auctioned at a time.
- Listing does not guarantee a sale.

Before submitting an offer, make sure you understand the lock-in mechanism and cancellation restrictions.

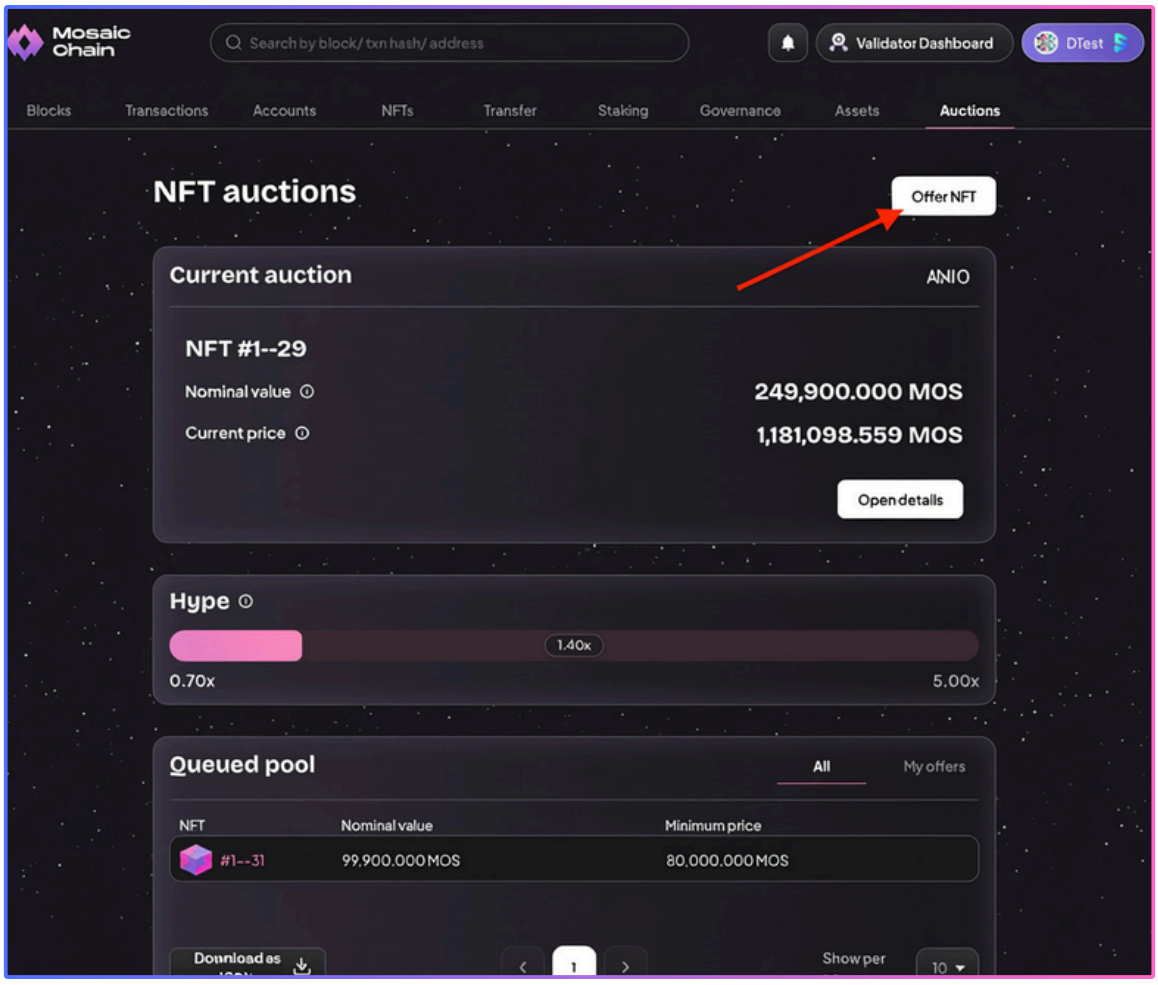
Steps

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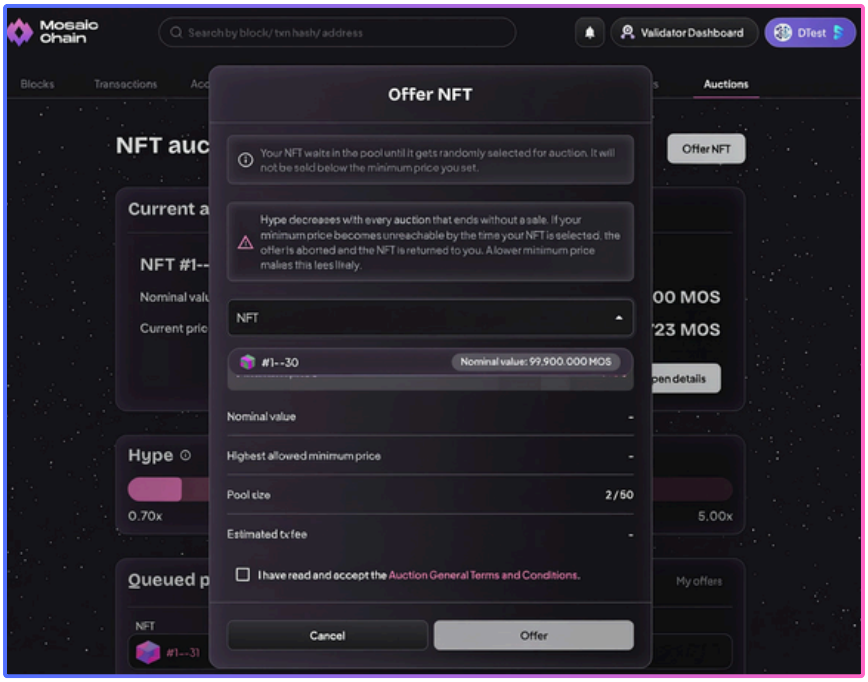
https://explorer.mosaicchain.io/auctions

Connect your wallet with the **Connect wallet** button. Choose the account that holds the NFT you want to sell.

Click on the **Offer NFT** button on the top right.



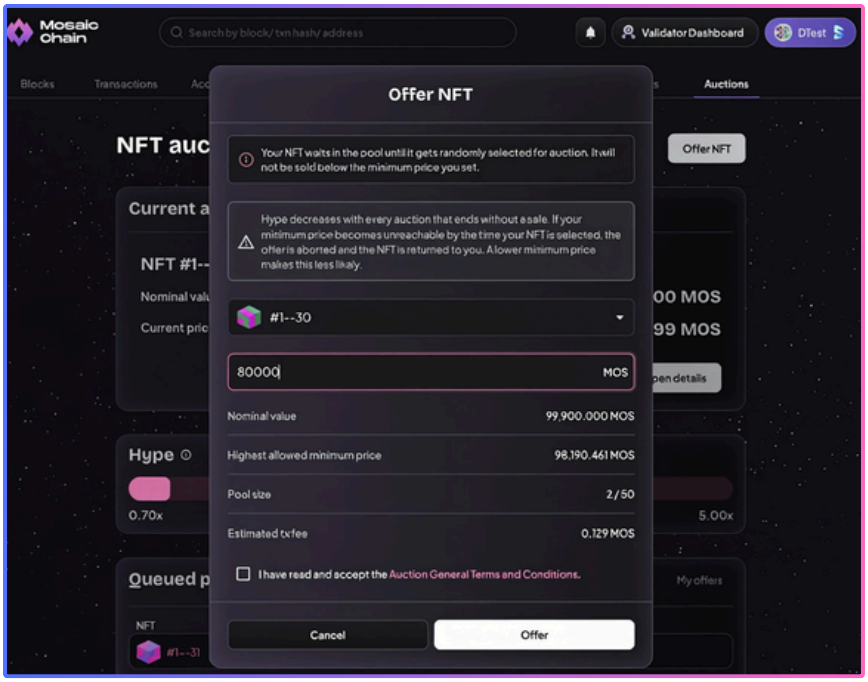
In the opening modal choose the NFT from the dropdown. Only not bound validator NFTs are shown in the list that are on the chosen account.



The highest allowed minimum price will be calculated based on the nominal value and the current hype. You can set a lower minimum price than the auto calculated. This minimum price guarantees that your NFT cannot be sold at a lower price than this minimum price.

When the NFT is selected for auction, the system checks whether the expected ending price of the auction meets the seller's minimum price. If the expected ending price is below the given minimum price, the auction will be automatically rejected and the NFT is returned unlocked to the seller.

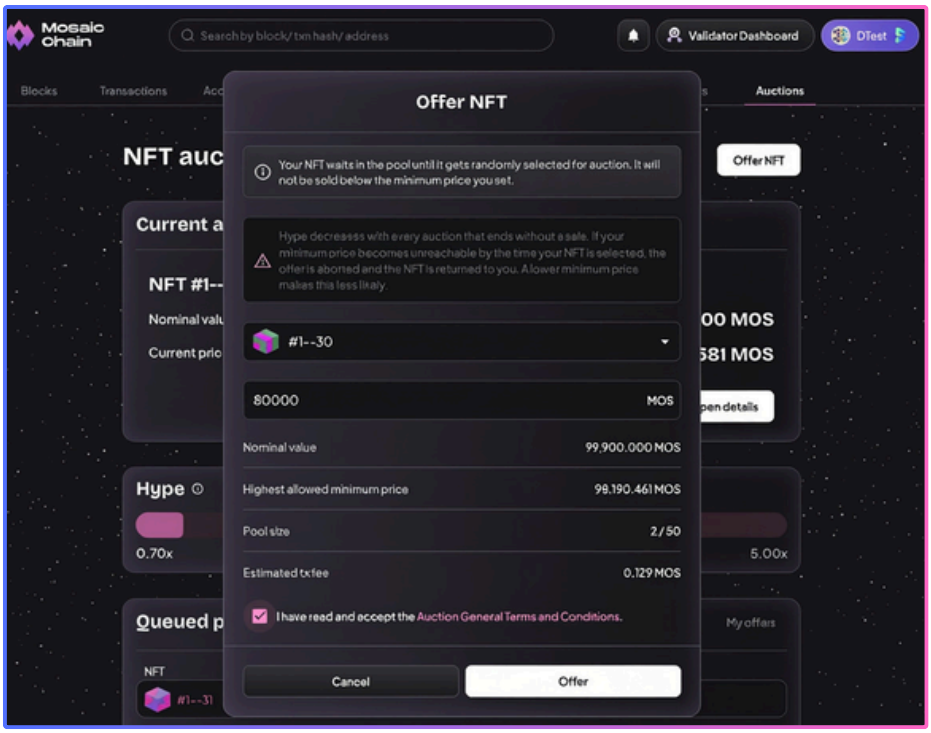
If you want to protect yourself against an unfavorable auction outcome or prolonged lock-in, setting an appropriate minimum selling price before listing is strongly recommended.



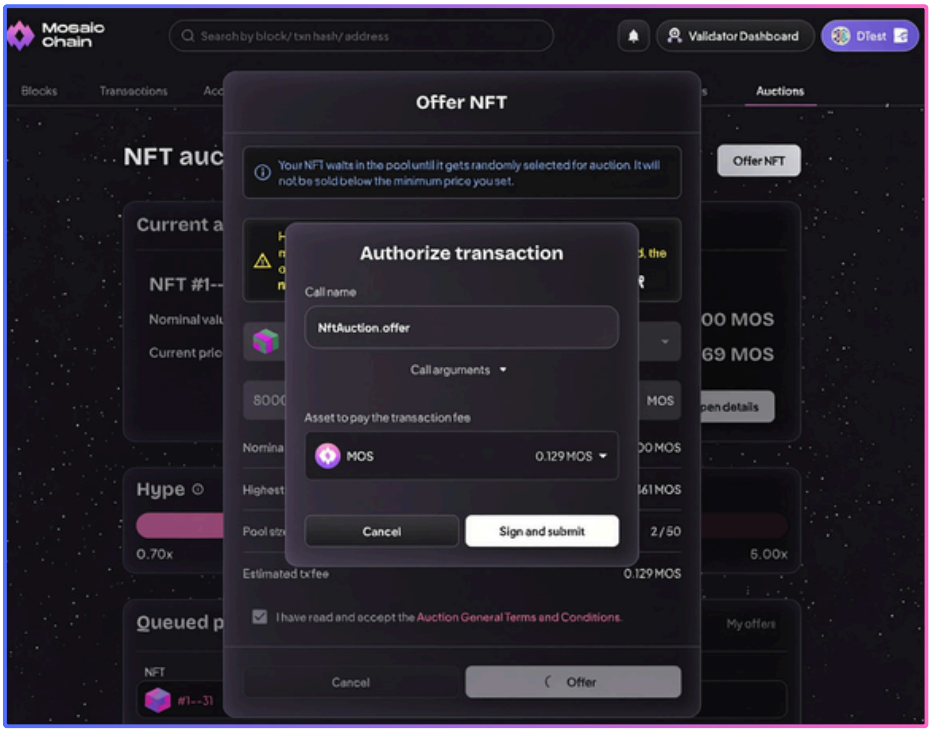
On the bottom of the form you can find a link to the Auction General Terms and Conditions. Read it carefully before offering your NFT to auction.

If you have set your minimum selling price, reviewed the details and read the Terms and Conditions, check the checkbox of acceptance.

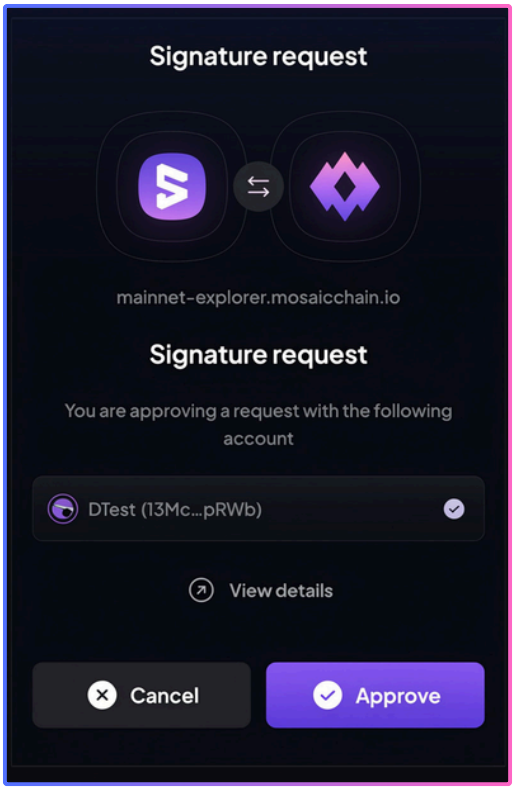
Then click on the **Offer** button.



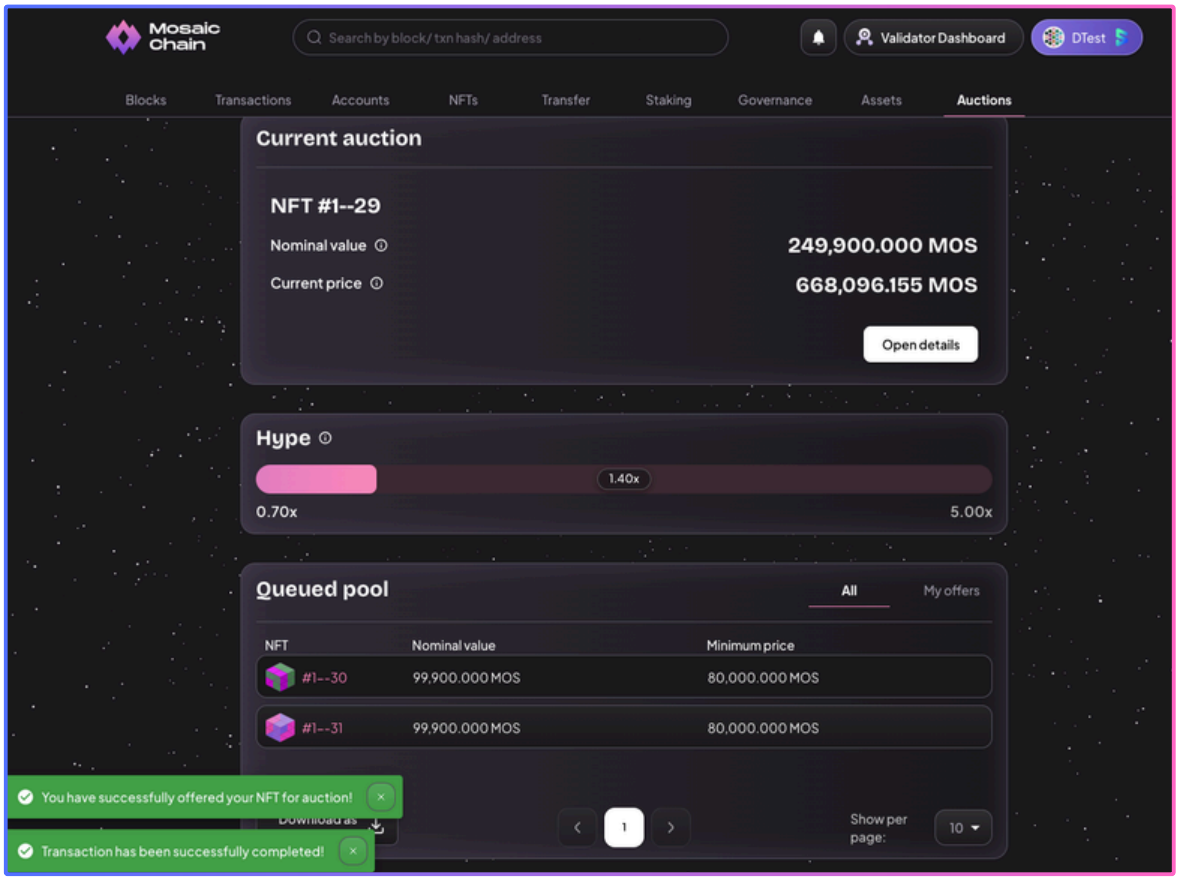
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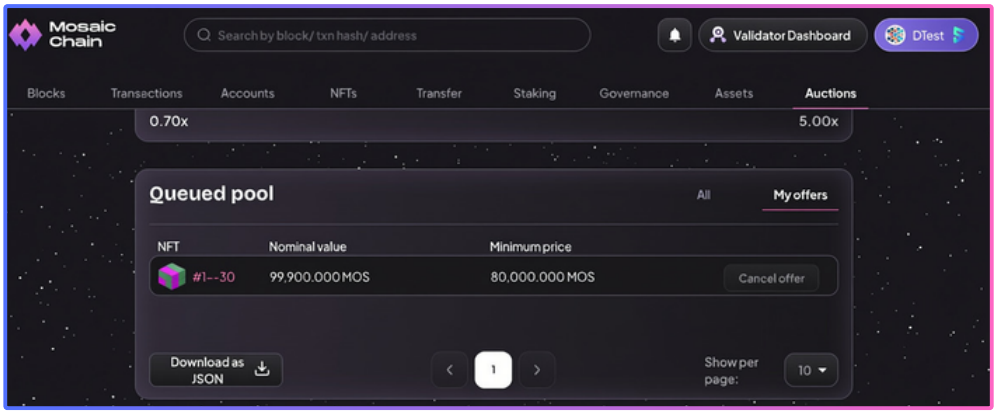


The wallet provider's window appears. Check the details and approve the transaction.



With a successful transaction, your NFT enters the auction pool. It will remain there until selected, cancelled, or automatically rejected.





4. Cancelling a Listing

Cancellation of a listing of an NFT is possible only when both of the following conditions are met:

1. At least four auction rotations have elapsed since the NFT was offered.
2. The NFT is not currently selected for an active auction.

Four rotations correspond to approximately 12 days if auctions run for their full duration. They may take less time if auctions finish earlier.

Important: NFT selection is completely random. The same NFT may be selected repeatedly, which can delay cancellation.

If you want to protect yourself against an unfavorable auction outcome or prolonged lock-in, setting an appropriate minimum selling price before listing is strongly recommended.

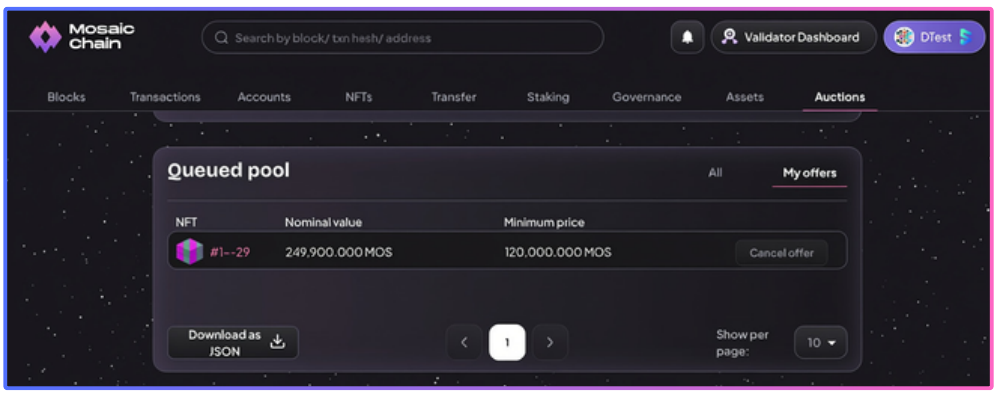
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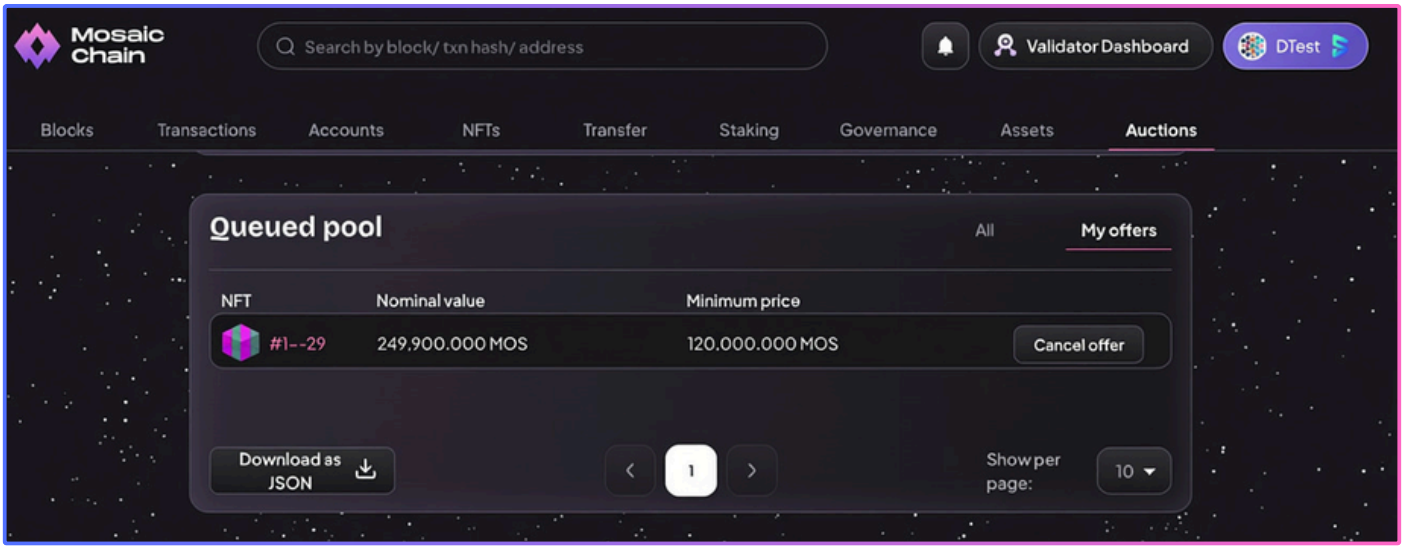
https://explorer.mosaicchain.io/auctions

You can only cancel your NFT's listing, if it is currently not selected for auction.
At the Queued Pool card, click on **My offers** at the top right corner.

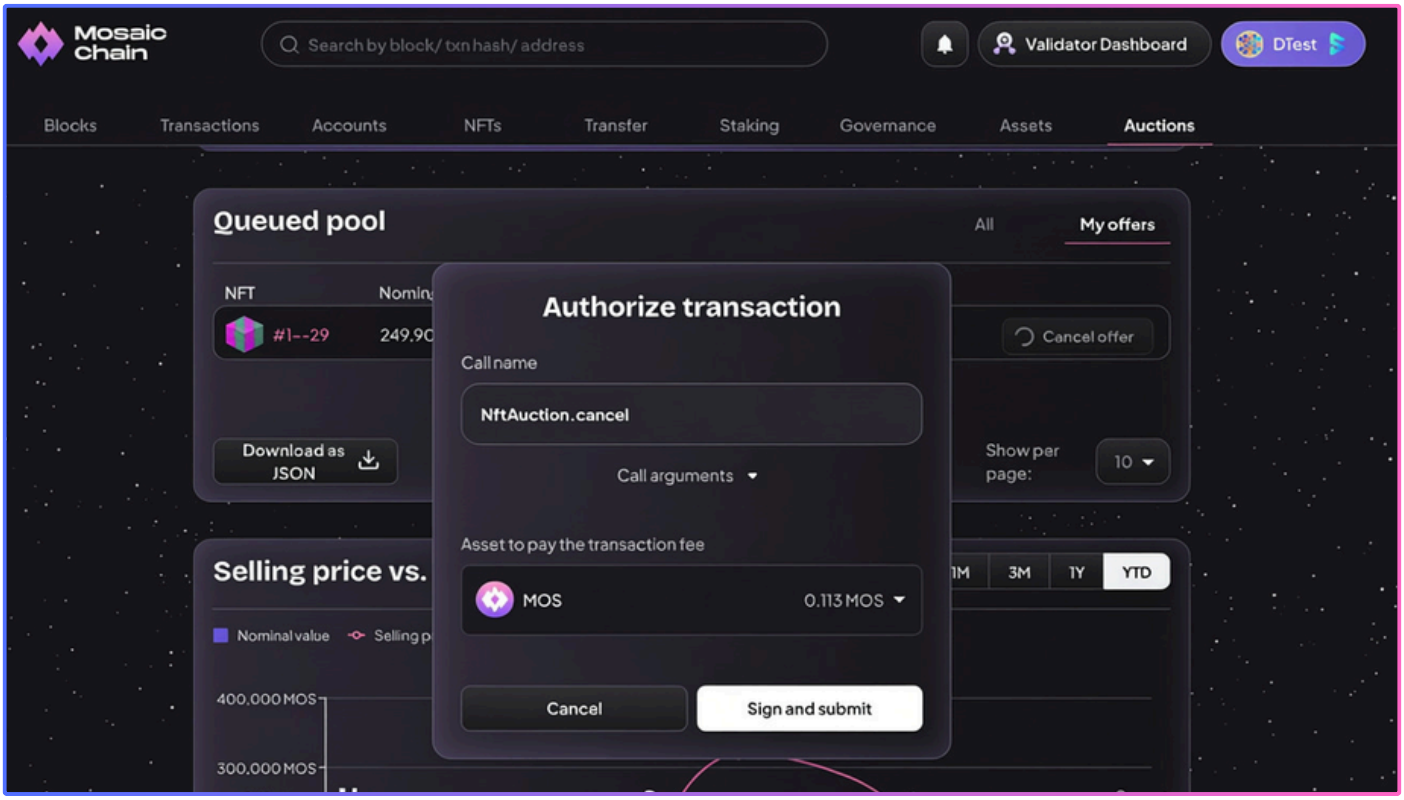
Next to your NFT you can see a **Cancel offer** button. If the minimum offer period (4 rotations) has not passed yet, the Cancel button is disabled.



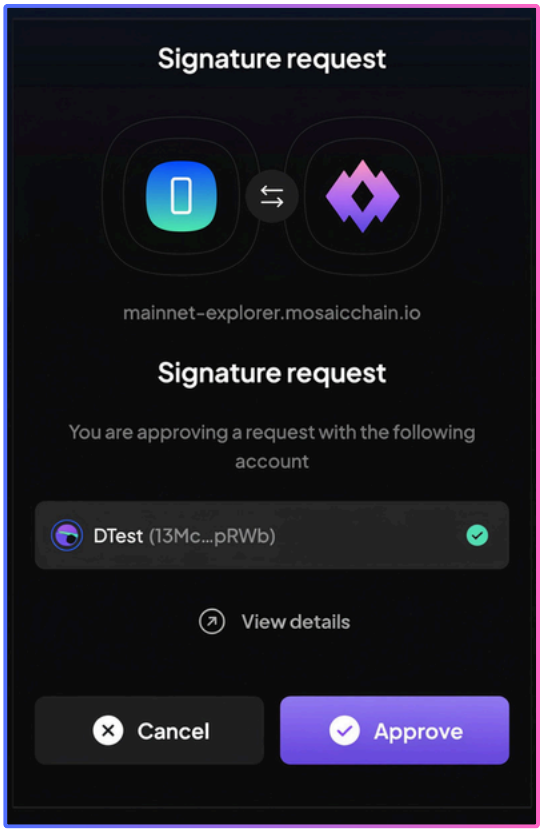
If the Cancel button is enabled, click on it.



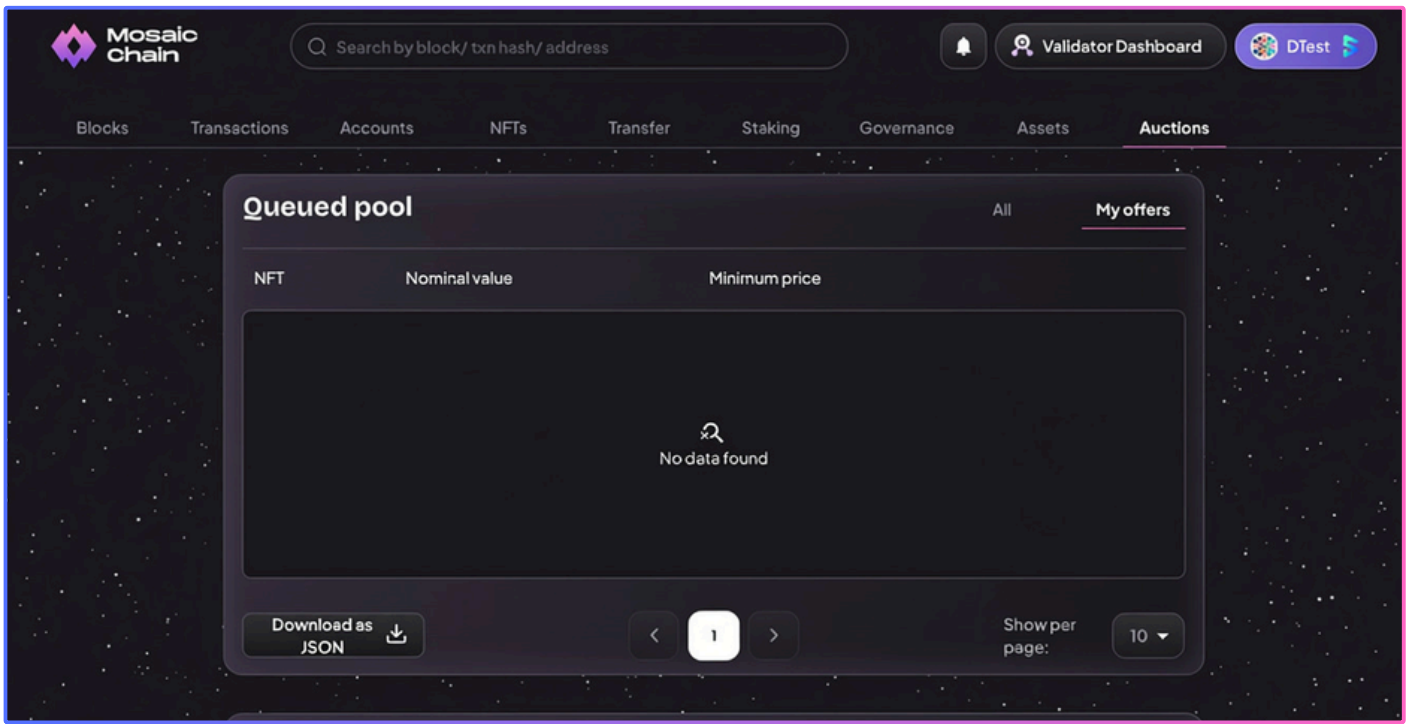
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The wallet provider's window appears. Check the details and approve the transaction.



The transaction gets into a block and will be finalized in 10-30 seconds. With a successful transaction, your NFT is removed from the auction pool, will be unlocked and under your control.



5. Frequently Asked Questions (FAQ)

1. Can I place a bid on an NFT?

No. The Mosaic Chain auction uses a Dutch Auction mechanism. There are no individual bids, and buyers cannot manually change the price.

2. Can I wait until the price reaches its lowest possible level?

Yes. You can wait as long as the auction remains active (taking into consideration the transaction finalization time). However, another buyer may purchase the NFT before the price reaches its ending price.

3. Does every NFT enter an active auction immediately after listing?

No. NFTs first enter the auction pool and are selected randomly. Only one NFT is actively auctioned at a time.

4. What happens if nobody purchases the NFT?

The auction expires after its maximum duration. The NFT returns to the pool and may be selected again. The timeout also influences the global Hype calculation.

5. Can the same NFT be selected more than once?

Yes. Selection is random, and there is no explicit protection against repeated selection.

6. Can I sell an NFT that is currently being used by my validator?

No. Only NFTs with a Not Bound status can be offered for sale.

7. Can I cancel my listing whenever I want?

No. At least four auction rotations must have elapsed, and the NFT must not be selected for an active auction.

8. Is the four-rotation period always 12 days?

No. Approximately 12 days is an estimate based on the expected auction schedule. Actual cancellation eligibility depends on the actual length of the auctions.

9. Do sellers have the freedom to decide their minimum selling price?

Sellers may set a minimum selling price, but its highest allowed value is determined by the current hype at the time of the offer.

10. What happens if the expected ending price falls below my minimum selling price?

The system automatically rejects the NFT when it is selected. The NFT is unlocked and returned to your control.

11. Can the Hype parameter change during my active auction?

The global Hype changes after auctions are completed, therefore the pricing parameters captured when your NFT was selected remain fixed throughout its active auction.

12. Can I pay more than the price displayed when I initiate a purchase?

No. The platform sets a maximum purchase price based on the displayed price. If the blockchain price exceeds that limit when the transaction is processed, the transaction fails.

13. What happens if two users purchase the same NFT simultaneously?

The first valid transaction included in a block successfully completes the purchase. Subsequent transactions fail because the NFT is no longer available.

14. What happens if a purchase transaction fails?

The purchase is not completed. The buyer does not receive the NFT, and the purchase price is not deducted, although transaction fees may still apply.

15. Does purchasing a Validator NFT automatically make me a Validator?

No. The NFT must be bound to a suitably configured validator node before its validator permissions can be exercised.

16. Can the Council change auction parameters?

The Council Collective can adjust designated parameters: the maximum and minimum hype value and auction duration, through the applicable on-chain mechanism. The logic for the pricing formula, the selection, and the purchase is runtime code; it cannot be modified by Collectives.

17. Can the Council interrupt an active auction or cancel a listing?

The Council has designated administrative capabilities to interrupt an active auction or cancel a listing in exceptional circumstances. Such actions are executed on-chain and are publicly traceable.

18. Can the Council set the price or the hype value?

No. The Council can only set the minimum/maximum hype value, not the current hype. Nor can they set the price, it is auto calculated by the runtime.

19. Can I independently verify the current NFT price?

Yes. The relevant pricing information is available from on-chain storage. The Explorer interface calculates the current price directly from blockchain data.