

Hathor Hackathon developer information

Documentation

<u>Hathor Docs</u> - <u>https://docs.hathor.network/</u> is the best place to learn all about Hathor. It has specific information about Hathor smart contracts, called Nano Contracts: https://docs.hathor.network/pathways/build-dapp.

Nano Contracts have a different architecture and implementation than traditional smart contracts (EVM/Solidity). Although they have the same capabilities (and more!), the programming experience varies a bit.

The first step is understanding https://docs.hathor.network/explanations/features/nano-contracts/how-it-works. Don't worry if there are some concepts that are still not 100% clear. There's a hands-on tutorial on developing and testing your first nano contract:

- Part 1 https://docs.hathor.network/tutorials/sdk/develop-a-blueprint-part-1
 'focuses on the design of the contract, how we should model its attributes and methods.
- Part 2 https://docs.hathor.network/tutorials/sdk/develop-a-blueprint-part-2
 builds the contract step-by-step, showing how each part of the code works. It also shows how to develop unit tests for your contract.

You can also consult supporting documentation to help in the development of contracts:

- The <u>guidelines</u> <u>https://docs.hathor.network/references/sdk/blueprint/guidelines</u> describe all imports, built-ins and attributes available for use, along with other information to support developers.
- The <u>API</u> <u>https://docs.hathor.network/references/sdk/blueprint/api</u> describes all standard data types and classes available.
- Nano Contracts <u>flow doc</u> <u>https://docs.hathor.network/references/sdk/blueprint/nano-contracts-flow</u>

 explains all steps when executing a transaction.

Further examples of nano contracts can be found on the <u>Github repository</u> - <u>https://github.com/HathorNetwork/hathor-core/tree/experimental/nano-testnet-v1.7.1/hathor/nanocontracts/blueprints</u> .

Wallets

Apart from the contracts, dApps usually have a web interface that connects to the user's wallet. <u>Hathor supports Reown</u> -

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https://docs.hathor.network/references/sdk/blueprint/guidelines (formerly WalletConnect) for that. It's also worth taking a look at Hathor's betting demo app: https://betting.hathor.network/. You can find its code here - https://github.com/HathorNetwork/bet-dapp/tree/refactor/new-ui.

How to get support

If you have questions, need any help or have some feedback, you can send a message on our Discord #development channel: https://discord.gg/3zemf6CM.

Testing and testnet

The first step to testing your contract is developing unit tests. This has been mentioned in the previous section, on Part 2 - https://docs.hathor.network/tutorials/sdk/develop-a-blueprint-part-2 of the Nano development tutorial.

Once that is done, the next step is creating your own local network so you can test the nano contract end-to-end, with real transactions and distributed nodes if you wish. You can check a tutorial to set up a local network here - https://docs.hathor.network/how-to-guides/sdk/set-up-localnet. Make sure to select "Blueprints or Hathor nodes" on the first step.

Finally, there's a testnet specifically created for the hackathon. The information to connect to it is:

- Fullnodes: https://node1.hackaton.hathor.network/v1a/ and https://node2.hackaton.hathor.network/v1a/
- Explorer: https://explorer.hackaton.hathor.network/
- Explorer-Service: https://explorer-service.hackaton.hathor.network
- Tx mining service: https://txmining.hackaton.hathor.network/

To deploy a blueprint and contract, follow this gist: https://gist.github.com/obiyankenobi/5ec12bc1f31e438e8877298ae97fde15.

Get testnet HTR

At this moment there's no faucet for the hackathon testnet. If you need HTR to use on the testnet, you can ask our community admins on Telegram or Discord.

Make sure to mention you need *hackathon* testnet tokens. Those are different from the regular testnet.

Nano Contracts Cheatsheet

Here is a file with some information about the most common methods and types used by nano contracts:

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