

* EY does not control or manage Nightfall and retains no ownership over the Nightfall code. Nightfall is a public domain, open-source initiative to which any person or firm can contribute and EY continues to contribute new ideas and code as well based on our own thinking about how privacy technology needs to develop to support widespread adoption. You can find the original Nightfall information at https://github.com/eyblockchain/

FAQs

Nightfall is a zero-knowledge (ZK) ZK-ZK Roll-Up that helps enable private transactions on the public Ethereum blockchain. Using Nightfall, enterprises can orchestrate private transactions efficiently on the Ethereum Mainnet without compromising the transparency, data immutability and security that Ethereum provides.

How can I transact using Nightfall?

There are full instructions in the Nightfall GitHub repository for creating a Nightfall node to interact with other organizations using Nightfall. The instructions will let you fire up a local instance on your laptop, from which you can move to a full production implementation.

How do I get authorized to use Nightfall?

To use Nightfall, you will need to prove that you are a member of a bona fide organization by obtaining a x509 code or document signing certificate from a recognised Certification Authority. You will then need to present this certificate and your digitally signed Ethereum address to a Nightfall smart contract, which will check your submission and whitelist your Ethereum address, as part of the validation process.

Doesn't the use of x509 certificates break decentralization?

There is no one authority that provides the certificates, instead there are several, making broad censorship difficult. Once you have a certificate, the process is completely autonomous.

If I'm required to reveal my/my organization's identity via a x509 certificate, doesn't that remove privacy?

No. You need to identify yourself in order to use Nightfall in support of AML/KYC compliance, but the transactions you undertake are private, protected by Nightfall's zero-knowledge technology.

How much does it cost to use Nightfall?

Private transfers within Nightfall's Layer 2 cost approximately ~19k Gas per transaction, with 64 transactions per Layer 2 block. This is approximately 3.5x cheaper than an ERC20 transfer. The fiat cost will depend on the Gas price for the particular chain that you are using. The cost of moving funds into Nightfall from an ERCx contract is higher (~100,000 Gas), but this is a relatively rare transaction.

Doesn't that mean I have to wait for a week for my transaction to finalize?

No, Nightfall with ZK-ZK rollup provides instant finality once the final rollup proof is verified onchain, which is very different from an optimistic rollup.

Is there a way for anonymous organizations or individuals to use Nightfall?

No. Nightfall is designed to be used by enterprises for B2B applications, which may have AML/KYC requirements. As such, it requires users to represent properly constituted legal entities. Nightfall is decentralised and private, but not anonymous.

Continuing the conversation

To find out more about Nightfall, get in touch with the team.



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