

Requesting data commitment ranges

By default, the Blobstream X deployments on Ethereum will be updating every 4 hours, and on Arbitrum One and Base, updating every 1 hour. If you wish for the Blobstream X contract to be updated at a different cadence, then you have several different options for how to update the smart contract.

To request proofs to be submitted to the Blobstream X contract at a different cadence, you can do one of the following:

Recommended setup

Run the Blobstream X operator with hosted proving on the Succinct platform, by running an operator script that pings the platform with proof requests at a specified cadence.

[Follow these instructions to run the operator script.](#)

Here are example values for the .env file:

1. TENDERMINT_RPC_URL
2. from [the public Celestia list](#)
3. .
4. SUCCINCT_RPC_URL
5. =https://alpha.succinct.xyz/api
6. Request for SUCCINCT_API_KEY
7. from [the Succinct team](#)
8. .
9. CHAIN_ID
10. is the chain ID of the deployed Blobstream X contract.
11. CONTRACT_ADDRESS
12. : Blobstream X proxy contract address.
13. NEXT_HEADER_FUNCTION_ID
14. &HEADER_RANGE_FUNCTION_ID
15. : Get the functionId
16. 's from the Blobstream X contract by using the nextHeaderFunctionId
17. and headerRangeFunctionId
18. respectively, which are public storage variables.

Local proving

[Run the Blobstream X operator with local proving.](#)

TIP

Note: Requires a large cloud machine to run in a reasonable amount of time. EC2 r6a.16xlarge takes ~30 minutes to generate a header range proof.

Request proof onchain

Directly request a proof via the Blobstream X contract interface. Unlike the Blobstream X operator which handles requests off-chain, requesting on-chain requires gas, but the proof will be generated and relayed by the Succinct platform.

1. Call requestHeaderRange(uint64 _targetBlock)
2. with the end of the range you want a commitment for.
3. A DataCommitmentStored(uint256, uint64, uint64, bytes32)
4. will be emitted for the requested range when it is stored in the contract. Listen to this event to know that the proof has been generated successfully. [\[\[Edit this page on GitHub \]](#) Last updated: [Previous page Querying the Blobstream proofs](#) [Next page New Blobstream X deployments](#) [\[](#)