Using Blobs

The proposed Ecotone upgrade impacts node operators because of the new Beacon endpoint forop-node . Soon after the Ecotone activation, batch transactions will be sent as 4844 blobs, and blobs can only be retrieved from Beacon nodes. This means node operators will need access to a beacon node/consensus client (i.e. Lighthouse, Lodestar, Nimbus, Prysm, Teku, etc.).

Preparing Your Node

These steps are necessary for EVERY node operator:

Update to the latest release

See theSoftware Releases page for the minimum release version.

Configure the Ecotone Activation Date

- If you are operating a node for an OP Chain that has an entry in thesuperchain-registry (opens in a new tab)
- ,
- the Ecotone activation date is part of theop-node
- andop-geth
- nodes. So,
- no action is needed for the sequencer after upgrading to the latest release.
- For node operators of custom chains not included in thesuperchain-registry (opens in a new tab)
- ,
- the activation dates can be set in therollup.json
- (setecotone_time
-) or
- set the activation time via overrides (CLI) in bothop-node
- andop-geth
- .
- These will need to be set onop-node
- andop-geth
- for the sequencer and all other nodes.

⚠ Even if the ecotone activation is configured via therollup.json , it still needs to be configured separately onop-geth via command line flag.

op-node op-geth --override.ecotone

value (default: 0) (OP_NODE_OVERRIDE_ECOTONE) Manually

specify

the

Ecotone

fork

timestamp,

overriding

the

bundled

setting

Prepare for Activation

- All node operators must set an L1 beacon value in yourop-node
- as soon as you update to the latest release.

--l1.beacon

value (OP_NODE_L1_BEACON) HTTP

endpoint

Address

of

L1

Beacon-node. * Either run your own L1 beacon node likeLighthouse(opens in a new tab) * or use a third-party beacon node RPC service, likeQuicknode(opens in a new tab) * .

Configure a Blob Archiver (Archive Nodes)

There is a configurablebeacon-archiver that will allow nodes to sync blob data that is older than 18 days - after blobs are 18 days old, normal beacon nodes will "prune" or remove them. If your node is already in sync with the head of the chain, you won't need to use abeacon-archiver .

- If you're spinning up a new node, if you load it from a snapshot that's within 18 days (the amount of time until blobs are pruned) you will not need to use abeacon-archiver
- at all as long as your node does not fall offline for more than 18 days.
- If you're running a new node that is syncing more than 18 days (the amount of time until blobs are pruned) after Ecotone launch, then you will need to configure abeacon-archiver
- on theop-node
- .

--l1.beacon-archiver

value (OP_NODE_L1_BEACON) HTTP

Endpoint

of

a

Blob

Archiver

or

an

L1

Beacon-node

that

does

not

prune

blobs Choose one of the following options to access a beacon archiver endpoint:

- Option 1:
- Run a beacon node with blobs pruning disabled. For example, you can run your own L1 beacon node likeLighthouse(opens in a new tab)
- and configure it to retain all blobs and use that endpoint here.

lighthouse

--prune-blobs

false * Option 2: * Run ablob-archiver * and configureop-node * to use theblob-archiver * API service with--l1.beacon-archiver * . * Running ablob-archiver * is lighter weight than running a beacon node that does not prune blobs:https://github.com/base-org/blob-archiver(opens in a new tab) * . There is a configurablebeacon-archiver * that will

allow nodes to sync blob data that is older than 18 days - after blobs are 18 days old, normal beacon nodes will "prune" or remove them. If your node is already in sync with the head of the chain, you won't need to use abeacon-archiver * .* If you're spinning up a new node, if you load it from a snapshot that's within 18 days (the amount of time until blobs are pruned) you will not need to use abeacon-archiver * * at all as long as your node does not fall offline for more than 18 days. * * If you're running a new node that is syncing more than 18 days (the amount of time until blobs are pruned) after Ecotone launch, then you will need to configure abeacon-archiver * * on theop-node * * .

--l1.beacon-archiver

value (OP_NODE_L1_BEACON) HTTP

Endpoint

of

a

Blob

Archiver

or

an

L1

Beacon-node

that

does

not

prune

blobs * Option 3: * If you don't want to operate any Beacon infrastructure, you can use an external service that provides access to pruned Blobs.

Configuration Using Snap Sync