

# How to Run an Avail Light Client

This guide outlines how to set up an Avail light client. You can either:

1. [Run the light client on an existing network](#)
2. [Run the light client locally](#)

## Latest release

You can find the latest release binary in the `avail-light` repository.

Repository Latest Release [avail-light \(opens in a new tab\)](#) [v1.7.6 \(opens in a new tab\)](#)

## Run on an Existing Network

In this example, you will download the light client and connect to an existing public network.

1. Download the latest Avail light client [release \(opens in a new tab\)](#)
2. that is compatible with your system. The light client is available pre-built for different architectures. If you prefer building the light client yourself, see [build the Avail light client from source](#)
3. .
4. Run the light client with the following pre-defined configuration file:

```
./avail-light-
```

```
--network
```

goldberg 1. If you want to supply your own configuration file (see [reference \(opens in a new tab\)](#) 2. ), use:

```
./avail-light
```

```
--config
```

```
config.yaml
```

```
--network
```

goldberg That's it ! You have successfully run the light client and connected to a public network. The light client should similar to the following:

Sample output The client output should look like this:

```
2023-06-04T02:56:31.871284Z
```

```
INFO
```

```
avail_light::telemetry:
```

```
Metrics
```

```
server
```

```
on
```

```
http://0.0.0.0:9520/metrics 2023-06-04T02:56:31.884271Z
```

```
INFO
```

```
avail_light::http:
```

```
RPC
```

```
running
```

```
on
```

```
http://127.0.0.1:7000 2023-06-04T02:56:31.884386Z
```

```
INFO
```

```
avail_light::network:
```

```
Local
```

```
peer
```

```
id:
```

PeerId ( "12D3KooWQ77VEayXfSPWcj6ucAGcjZRTL8ANmtjsuULoyToGSBoo" ) .

Public

key:

Ed25519 ( PublicKey(compressed) ) :

d44de4113b372855a655f1675325379705aa7a273698194e8e6814dab7791a ). 2023-06-04T02:56:31.884605Z

INFO

Server::run{addr= 127.0 .0.1:7000}:

warp::server:

listening

on

http://127.0.0.1:7000 2023-06-04T02:56:31.892181Z

INFO

avail\_light::network::event\_loop:

Local

node

is

listening

on

"/ip4/127.0.0.1/udp/37000/quic-v1" 2023-06-04T02:56:31.892487Z

INFO

avail\_light:

Bootstrapping

the

DHT

with

bootstrap

nodes... 2023-06-04T02:56:31.892487Z

INFO

avail\_light::network::event\_loop:

Local

node

is

listening

on

"/ip4/192.168.1.146/udp/37000/quic-v1" 2023-06-04T02:56:31.892540Z

INFO

avail\_light::network::event\_loop:

Local

node

is

listening

on

"/ip4/127.0.0.1/tcp/37000" 2023-06-04T02:56:31.892745Z

INFO

avail\_light::network::event\_loop:

Local

node

is

listening

on

"/ip4/192.168.1.146/tcp/37000" 2023-06-04T02:56:42.220179Z

INFO

avail\_light::rpc:

Connection

established

to

the

node:

wss://goldberg.avail.tools:443/ws

< v1.6.0-99b85257d6b/data-avail/ 9> 2023-06-04T02:56:42.444576Z

INFO

avail\_light::light\_client:

Starting

light

client... 2023-06-04T02:56:43.453935Z

INFO

avail\_light::subscriptions:

Received

finalized

block

header

header.number= 2074 2023-06-04T02:56:43.455236Z

INFO

avail\_light::light\_client:

Processing

finalized

block

block\_number= 2074

block\_delay= 0 2023-06-04T02:56:43.456055Z

INFO

avail\_light::light\_client:

Random

cells

generated:

4

block\_number= 2074

cells\_requested= 4 2023-06-04T02:56:43.617885Z

INFO

avail\_light::light\_client:

Number

of

cells

fetched

from

DHT:

0

block\_number= 2074

cells\_from\_dht= 0 2023-06-04T02:56:43.820098Z

INFO

avail\_light::light\_client:

Number

of

cells

fetched

from

RPC:

4

block\_number= 2074

cells\_from\_rpc= 4 2023-06-04T02:56:43.889260Z

INFO

avail\_light::light\_client:

Completed

4

verification

rounds

in

433.968 ms

block\_number= 2074 2023-06-04T02:56:43.889395Z

INFO

avail\_light::light\_client:

Confidence

factor:

93.75

block\_number= 2074  
confidence= 93.75 2023-06-04T02:56:43.889495Z  
INFO  
avail\_light::light\_client:  
Partition  
cells  
received.  
Time  
elapsed:  
0 ns  
block\_number= 2074  
partition\_retrieve\_time\_elapsed= 0.0  
partition\_cells\_fetched= 4 2023-06-04T02:56:44.050133Z

INFO  
avail\_light::light\_client:  
DHT  
PUT  
operation  
success  
rate:  
inf  
block\_number= 2074 2023-06-04T02:56:44.050211Z

INFO  
avail\_light::light\_client:  
4  
cells  
inserted  
into  
DHT.  
Time  
elapsed:  
160.697 ms  
block\_number= 2074  
partition\_dht\_insert\_time\_elapsed= 0.160697

## Build From Source

You can build the light client directly from source.

git  
clone  
<https://github.com/availproject/avail-light>.git cd  
avail-light cargo

build

--release Find the resultingavail-light binary in thetarget/release directory.

## Next Steps

### Run a Full Node

Consider running a full node by following the deployment guide[here](#) .

[Overview](#) [Light Client API Reference](#)