


[Mempool Dumpster](#) is a free mempool transaction archive, brought to you by Flashbots in collaboration with various transaction providers (Infura, bloXroute, Chainbound, Eden, as well as local geth nodes):

- Data: mempool-dumpster.flashbots.net
- The data is published under the [CC-0 public domain license](#) (allowing any use whatsoever)
- Source code: [GitHub - flashbots/mempool-dumpster: Dump all the mempool transactions](#)  (in Parquet)

The core output is a daily Parquet and CSV file, which contains:

- Transaction metadata
- Information about which sources it was received from
- Raw transaction (RLP-encoded, only in the Parquet file)

You can find the files on the website for a particular month, like this one [2023-09](#).

- CSV example: [Mempool Dumpster - Daily CSV Example · GitHub](#)
- Daily summary file, like [2023-09-14_summary.txt](#)
- For fast query execution, we recommend working with the [Parquet](#) output files (more details below).

ClickHouse

We strongly recommend [ClickHouse](#) to work with the datasets - it's versatile, performant, and optimized for large datasets.

- You can use ClickHouse locally or also [ClickHouse Cloud](#), where you can upload the CSV files and have a nice user interface.
- ClickHouse is open-source, and you can install it based on the [installation instructions](#), or using Homebrew:

```
brew install clickhouse
```

See also:

- [ClickHouse SQL Statements](#)
- `[clickhouse-local`

```
](https://clickhouse.com/docs/en/operations/utilities/clickhouse-local)
```

- [DuckDB](#) is pretty good too

Download data

Grab a dataset for a particular day from [here](#):

```
wget https://mempool-dumpster.flashbots.net/ethereum/mainnet/2023-09/2023-09-14.parquet
```

Explore the dataset

Show the schema

```
$ clickhouse local -q "DESCRIBE TABLE '2023-09-14.parquet';"
```

Get exclusive transactions from bloxroute

```
$ clickhouse local -q "SELECT COUNT(*) FROM '2023-09-14.parquet' WHERE length(sources) == 1 AND sources[1] == 'bloxroute';"
```

Count exclusive transactions from all sources (query takes <1 sec)

```
$ clickhouse local -q "SELECT sources[1], COUNT(*) FROM '2023-09-14.parquet' WHERE length(sources) == 1 GROUP BY sources[1];" eden 22460 local 309 infura 133 apool 86 bloxroute 29871 chainbound 20008
```

Get details for a particular hash

```
$ clickhouse local -q "SELECT timestamp,hash,from,to,hex(rawTx) FROM '2023-09-14.parquet' WHERE hash='0x09ec56414462c3980772999e0d27fa0a79dcb667a156e1a1532ed0f5eaa672f3';"
```

These are the available fields:

```
$ clickhouse local -q "DESCRIBE TABLE '2023-09-14.parquet';" timestamp Nullable(DateTime64(3)) hash Nullable(String) chainId Nullable(String) from Nullable(String) to Nullable(String) value Nullable(String) nonce Nullable(String) gas Nullable(String) gasPrice Nullable(String) gasTipCap Nullable(String) gasFeeCap Nullable(String) dataSize Nullable(Int64) data4Bytes Nullable(String) sources Array(Nullable(String)) rawTx Nullable(String)
```

Have fun, and please share your results, insights and feature requests!