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envy :) show create table cell_towers

SHOW CREATE TABLE cell_towers

Query id: 7e04245c-639d-48a7-88fe-42ebbf088e2c

[envy] 2024.08.27 01:30:53.444026 [ 1533 ] {7e04245c-639d-48a7-88fe-42ebbf088e2c} <Debug> executeQuery: (from 127.0.0.1:37818) show create table cell_towers (stage: Complete)
--statement--
CREATE TABLE default.cell_towers
(
  'radio' Enum8('' = 0, 'CDMA' = 1, 'GSM' = 2, 'LTE' = 3, 'NR' = 4, 'UMTS' = 5),
  'mcc' UInt16,
  'net' UInt16,
  'area' UInt16,
  'cell' UInt64,
  'unit' UInt16,
  'lon' Float64,
  'lat' Float64,
  'range' UInt32,
  'samples' UInt32,
  'changeable' UInt8,
  'created' DateTime,
  'updated' DateTime,
  'averageSignal' UInt8
)
ENGINE = MergeTree
ORDER BY (radio, mcc, net, created)
SETTINGS index_granularity = 8192

[envy] 2024.08.27 01:30:53.474392 [ 1533 ] {7e04245c-639d-48a7-88fe-42ebbf088e2c} <Debug> executeQuery: Read 1 rows, 487.00 B in 0.030371 sec., 32.926146653057195 rows/sec., 15.66 KiB/sec.
[envy] 2024.08.27 01:30:53.474636 [ 1533 ] {7e04245c-639d-48a7-88fe-42ebbf088e2c} <Debug> TCPHandler: Processed in 0.031347986 sec.

1 row in set. Elapsed: 0.031 sec.

envy :)
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envy :) select radio, count() from cell_towers group by radio ;

SELECT
  radio,
  count()
FROM cell_towers
GROUP BY radio

Query id: 5d2c7506-1f7b-428e-9677-5e2067344403

[envy] 2024.08.27 01:28:39.121912 [ 1533 ] {5d2c7506-1f7b-428e-9677-5e2067344403} <Debug> executeQuery: (from 127.0.0.1:37818) select radio, count() from cell_towers group by radio ; (stage: Complete)
[envy] 2024.08.27 01:28:39.122875 [ 1533 ] {5d2c7506-1f7b-428e-9677-5e2067344403} <Trace> Planner: Query to stage Complete
[envy] 2024.08.27 01:28:39.123152 [ 1533 ] {5d2c7506-1f7b-428e-9677-5e2067344403} <Trace> Planner: Query from stage FetchColumns to stage Complete
[envy] 2024.08.27 01:28:39.123889 [ 1533 ] {5d2c7506-1f7b-428e-9677-5e2067344403} <Debug> default.cell_towers (cfc4cf69-b2a1-4702-ab59-50188a9de1b3) (SelectExecutor): Key condition: unknown
[envy] 2024.08.27 01:28:39.123947 [ 1533 ] {5d2c7506-1f7b-428e-9677-5e2067344403} <Trace> default.cell_towers (cfc4cf69-b2a1-4702-ab59-50188a9de1b3) (SelectExecutor): Filtering marks by primary and secondary keys
[envy] 2024.08.27 01:28:39.124021 [ 1533 ] {5d2c7506-1f7b-428e-9677-5e2067344403} <Debug> default.cell_towers (cfc4cf69-b2a1-4702-ab59-50188a9de1b3) (SelectExecutor): Selected 1/1 parts by partition key, 1 parts by primary key, 5283/5283 marks by primary key, 5283 marks to read from 1 ranges
[envy] 2024.08.27 01:28:39.124065 [ 1533 ] {5d2c7506-1f7b-428e-9677-5e2067344403} <Trace> default.cell_towers (cfc4cf69-b2a1-4702-ab59-50188a9de1b3) (SelectExecutor): Spreading mark ranges among streams (default reading)
[envy] 2024.08.27 01:28:39.124165 [ 1533 ] {5d2c7506-1f7b-428e-9677-5e2067344403} <Debug> MergeTreeReadPool: min_marks_for_concurrent_read=24
[envy] 2024.08.27 01:28:39.124259 [ 1533 ] {5d2c7506-1f7b-428e-9677-5e2067344403} <Debug> default.cell_towers (cfc4cf69-b2a1-4702-ab59-50188a9de1b3) (SelectExecutor): Reading approx. 43276150 rows with 8 streams

1 row in set. Elapsed: 0.030 sec.

envy :)
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```
EXPLAIN indexes = 1
SELECT
  radio,
  count()
FROM cell_towers
GROUP BY radio

Query id: 1b9ed2a6-f8d6-4b9d-95c5-4c5a405d7992

[envy] 2024.08.27 01:23:38.961927 [ 1533 ] {1b9ed2a6-f8d6-4b9d-95c5-4c5a405d7992} <Debug> executeQuery: (from 127.0.0.1:37818) explain indexes=1 select radio, count() from cell_towers group by radio; (stage: Complete)
[envy] 2024.08.27 01:23:38.962369 [ 1533 ] {1b9ed2a6-f8d6-4b9d-95c5-4c5a405d7992} <Trace> Planner: Query to stage Complete
[envy] 2024.08.27 01:23:38.962474 [ 1533 ] {1b9ed2a6-f8d6-4b9d-95c5-4c5a405d7992} <Trace> Planner: Query from stage FetchColumns to stage Complete
[envy] 2024.08.27 01:23:38.963048 [ 1533 ] {1b9ed2a6-f8d6-4b9d-95c5-4c5a405d7992} <Debug> default.cell_towers (cfc4cf69-b2a1-4702-ab59-50188a9de1b3) (SelectExecutor): Key condition: unknown
[envy] 2024.08.27 01:23:38.963087 [ 1533 ] {1b9ed2a6-f8d6-4b9d-95c5-4c5a405d7992} <Trace> default.cell_towers (cfc4cf69-b2a1-4702-ab59-50188a9de1b3) (SelectExecutor): Filtering marks by primary and secondary keys
--explain--
1. Expression ((Project names + Projection))
2. Aggregating
3. Expression ((Before GROUP BY + Change column names to column identifiers))
4. ReadFromMergeTree (default.cell_towers)
5. Indexes:
6. PrimaryKey
7. Condition: true
8. Parts: 1/1
9. Granules: 5283/5283

[envy] 2024.08.27 01:23:39.029583 [ 1533 ] {1b9ed2a6-f8d6-4b9d-95c5-4c5a405d7992} <Debug> executeQuery: Read 9 rows, 364.00 B in 0.067736 sec., 132.868784693516 rows/sec., 5.25 KiB/sec.
[envy] 2024.08.27 01:23:39.029671 [ 1533 ] {1b9ed2a6-f8d6-4b9d-95c5-4c5a405d7992} <Debug> TCPHandler: Processed in 0.068211292 sec.

9 rows in set. Elapsed: 0.068 sec.

envy :)
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