Index only scans are powerful

Last updated by | Shital Modi | Nov 17, 2020 at 8:12 AM PST

Index only scans are powerful

- If a table has a very large row width but your queries are only accessing some columns at a time, create indexes on all those columns to use index-only scans.
    - They help a lot in reducing IO by preventing full row scans – thereby helping in exponential performance gains. We have seen this to be useful for many customers.
    - After the initial loading of data, it is important to VACUUM ANALYZE the table, then only index-only scans are used. VACUUM ing the table helps refreshing the visibility map of the table.
    - Useful resources about index only scans:
        - https://wiki.postgresql.org/wiki/Index-only_scans
        - https://www.postgresql.org/docs/10/indexes-index-only-scans.html
        - https://blog.dbi-services.com/an-index-only-scan-in-postgresql-is-not-always-index-only/

        - To see whether a btree index is efficiently using its page space you can ask pgstatindex. The average leaf density is the percentage of index leaf page usage:

```
SELECT avg_leaf_density FROM pgstatindex('btree_index_name');
```

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