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# Easy-to-use data schema management scheme for RDBMS that includes the utilization of the column-store features

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Relational database (RDB) and its management system (RDBMS) offer many advantages to us, such as a rich query language, maintainability gained from a concrete schema, robust and reasonable backup solutions such as differential backup, and so on. Recently, some of RDBMS has supported column-store features that offer data compression with a high level of both data size and query performance. These features are useful for data collection and management. However, it is not easy to leverage such features. First of all, RDBMS gains a reasonable performance only after a proper description of the data schema, which requires expertise.

In this talk, we propose an easy-to-use data schema management scheme for RDBMS that includes the utilization of the column-store features. Our approach mainly focuses on time-series data. First of all, our approach supports appropriate schema generation to leverage an RDBMS that includes automatic creation of sub-tables and indexes. This is good preparation for leveraging column-store features in RDBMS.

Along with the proposal, we implemented a prototype system on PostgreSQL-based RDBMS. Our preliminary experiments show a good performance over other ordinary approaches.

## Consider for promotion

No

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