Master's Thesis

Superb English Titel

Toller Deutscher Titel

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Abstract

Awesome Abstract

Zusammenfassung

Deutsche Zusammenfassung

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Introduction

With the decrease of main-memory prices over the past decades, in-memory databases have become a feasible data store for state of the art enterprise systems. Columnar in-memory databases, such as SAP HANA [1] or Hyrise [2], combine previously separated On-Line Transaction Processing (OLTP) and On-Line Analytical Processing (OLAP) systems into one single data store [3].

2

Motivation

Super Motivation.

3

Problem Statement

In this work we consider the problems. Therefore we want to answer the following research questions in our work.

1. Q1 ?
2. Q2 ?

For this work the following restrictions apply.

1. Restriction 1
2. Restriction 2

To answer our research questions, the remainder of this work is structured in the following way.

4

Related Work

Related Work.

5

Concept and Implementation

This Chapter provides a detailed understanding of our approach.

5.1 Mathematical Model

Mathmatical Model.

5.2 Architecture

Architecture.

6

Evaluation

We evaluate our architecture.

6.1 Benchmarking Setup

6.2 Experiments

7

Conclusion

We answered our research questions in the following way.

8

Future Work

Future Work

References

[1] Franz Färber, Sang Kyun Cha, Jürgen Primsch, Christof Bornhövd, Stefan Sigg, and Wolfgang Lehner. SAP HANA Database: Data Management for Modern Business Applications. *ACM SIGMOD Record*, 40(4):45–51, January 2012.

[2] Martin Grund, Jens Krüger, Hasso Plattner, Alexander Zeier, Philippe Cudre-Mauroux, and Samuel Madden. HYRISE: A Main Memory Hybrid Storage Engine. *Proceedings of the VLDB Endowment*, 4(2):105–116, November 2010.

[3] Hasso Plattner. A Common Database Approach for OLTP and OLAP Using an In-memory Column Database. In *Proceedings of the 2009 ACM SIGMOD International Conference on Management of Data*, SIGMOD '09, pages 1–2, New York, NY, USA, 2009. ACM.

A

Appendix

Appendix

Eigenständigkeitserklärung

Ich erkläre hiermit, dass ich die vorliegende Arbeit selbständig verfasst und keine anderen als die genannten Quellen und Hilfsmittel verwendet habe.

Potsdam, 21. August 2017

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