Bachelor Thesis
Monitoring in the Cloud: Survey on possible datastores

Overview
In the context of Cloud Computing an upcoming task is the monitoring of applications running in the Cloud. The monitored data typically represents historical data which is commonly referred to as time series data. Based on this time series data it is possible to analyze the monitored applications manually or automatically and derive necessary actions.

Typically the monitored data is stored in a Time-Series-Database (TSDB) which provides a powerful query interface. Regarding the context of Cloud Computing the TSDB should also be able to scale to handle a growing arbitrary number of monitored applications. Therefore NoSQL databases are a common solution to TSDBs.

Challenge
In this thesis different NoSQL database types (Key-Value, Document-Oriented, Column-Based) should be analyzed in terms of their capability as a datastore for a TSDB. In particular the existing TSDB KairosDB (with the Cassandra database) should be used as a starting point for this thesis. In the scope another possible database should be selected and KairosDB should be extended to use this database.

Contact
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