Supporting Big Data Exploration by NoSQL Technologies

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Visual Analytics aims at providing the best breed of automated, electronic and human data processing capabilities. Thereby, visualization poses the intermediary part in a semi-automated analytic process allowing to incorporate the respective, custom capabilities of humans and machines in a way that takes into account the strengths of both. In our project we leverage Visual Analytics to explore Big (Security) Log Data. At this juncture, we identified the need for a highly integrated end-to-end analysis pipeline bridging the gap between used technologies and the human analyst.

One promising approach to reach this goal is the integration of traditional database models and visualization data models. On the one hand, this allows for direct visualization of database contents. On the other hand, visualization models can be stored without expensive transformation procedures. The objective of our joint research is therefore the design of an integrated model that fulfils these requirements.

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