SDAC: A Model for Analysis of the Execution Semantics of Data Processing Framework in Cloud

Wenbo Zhou , Lei Liu , Peng Zhang , Shuai Lü , Jingyao Li

PII: S1477-8424(18)30004-6
DOI: 10.1016/j.cl.2018.07.005
Reference: COMLAN 306

To appear in: *Computer Languages, Systems & Structures*

Received date: 4 January 2018
Revised date: 6 June 2018
Accepted date: 7 July 2018

Please cite this article as: Wenbo Zhou , Lei Liu , Peng Zhang , Shuai Lü , Jingyao Li , SDAC: A Model for Analysis of the Execution Semantics of Data Processing Framework in Cloud, *Computer Languages, Systems & Structures* (2018), doi: 10.1016/j.cl.2018.07.005

Highlights

- A formal model for analysis of the execution semantics of data processing framework in cloud is proposed.
- The differences and similarities between the proposed approach and Aeolus component model are discussed.
- The model can be used to analyse more mechanisms in cloud, such as fault tolerance and performance optimization.