## SAP's global data mesh for composable data management supporting cross-domain consumption

(Invited Talk)

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## Abstract

SAP delivers a broad set of enterprise cloud applications which cut across a large variety of industry domains. SAP envisions supporting modern businesses by composing its portfolio of applications into an integrated offering called the Intelligent Enterprise Suite. This vision requires cross domain integration of processes, and integration and consumption of data and semantics. In order to achieve this ambitious undertaking we are implementing a global data mesh built upon the SAP HANA Cloud which is a holistic multi-modal cloud data management suite. SAP HANA Cloud is also available for direct consumption by customers. This talk describes the motivations of the data mesh, how it supports Domain Driven Design, its architecture, and the specific composable data management topics that we have encountered in elaborating and then implementing it.

## Biography

Anil K Goel is CTO / Head of Technology office for SAP HANA Database and Analytics at SAP, where he works with the globally distributed data management and analytics engineering teams to drive forward looking architectures, vision, strategy, research, and pathfinding. He also oversees data management and analytics related collaborative research and internship programs with many universities globally. His interests include database system architecture, in-memory and large-scale distributed computing, self-management of software systems and cost modelling. Anil earned a PhD in computer science from University of Waterloo. He holds MTech (CS) from Indian Institute of Technology, Delhi, and BE (Electronics and Communications Engineering) from University of Delhi.

This work is licensed under the Creative Commons BY-NC-ND 4.0 International License and appears in CDMS 2022, 1st International Workshop on Composable Data Management Systems, September 9, 2022, Sydney, Australia. Mihnea Andrei is an Executive Architect at SAP, HANA Database & Analytics, working within the Technology Office and Database organizations on data processing technology. His current focus is SAP HANA Cloud, cloud qualities and cloud-native database architecture patterns; and the SAP Data Plane, the globally distributed data mesh supporting SAP's data integration and using HANA Cloud as its data processing backbone. During his career, Mihnea has worked on the core engines of several database management systems (SAP HANA; Sybase ASE and IQ), covering most engine areas, e.g. query optimization, and execution, database stores (in-memory and on-disk, row and column oriented), transaction processing. He has co-authored a number of database publications reflecting his work, at various database conferences including SIGMOD and VLDB. Mihnea holds a DEA in computer science from Université Paris 6 and an MS in computer science from the Bucharest Polytechnic Institute.