Gateway-based Access Interface Management in Big Data Platform

Minh Chau Nguyen*, Hee Sun Won*

** Big Data SW Research Department, Electronics and Telecommunication Research Institute, South Korea*

chau@etri.re.kr, hswon@etri.re.kr

***Abstract*—Nowadays, there has been a massive data explosion coming from various devices sensors, social networks and IoT services. Due to big data analytics platforms, users can store, organize, and process these large sets of data to solve different issues in different domains. However, the current big data platforms still have many drawbacks. Among the limitations, managing access interfaces, an important process of analytic service development, needs to be improved significantly. The main reason is that the emergence of too many systems recently has been making the process become more and more complicated and costly. Therefore, we propose here a system related to the field of big data management, in particular to interface management to allow end-users to use easily their desired functions including metadata and data accessing. It also helps platform managers to extend and modify effortlessly the access interfaces. A case study on log analytic service is conducted to verify the validation and practice use of our system.**

***Keyword*— Analytic, Big data, Gateway, Interface Management, Metadata**

Minh Chau Nguyen received the B.S. degree (2009) in Computer Science from the University of Sciences, Ho Chi Minh, Vietnam and the M.S. degree (2013) in Computer Science from the Korea Advanced Institute of Science and Technology (KAIST). He is currently a researcher of the Big Data Software Research Dept. at Electronics and Telecommunications Research Institute (ETRI), Daejeon, Rep. of Korea. His research interests include big data management, software architecture and distributed systems.

Hee Sun Won received the B.S. (1990) degree in Computer Science from Yonsei University, the M.S.(1992) and Ph.D (2016) degree in Computer Science from Korea Advanced Institute of Science and Technology (KAIST). From 1992 to 1999, she was a researcher in Korean Broadcasting System, where he participated in developing HDTV SW simulator and Data Broadcasting. She is currently a principal researcher of Big Data SW Research Dept. at Electronics and Telecommunications Research Institute (ETRI). Her research interests include multi-tenant system, cloud resource management, big data analysis.