

# VNF management method using VNF Group Table in Network Function Virtualization

Chan-Ho Park\*, Dong-Ryeol Shin

*Department of Information and Communication Engineering, Sungkyunkwan University*

*2066, Seobu-ro, Jangan-gu, Suwon-si, Gyeonggi-do, Korea*

[Chanho3114@gmail.com](mailto:Chanho3114@gmail.com), [drshin@skku.edu](mailto:drshin@skku.edu)

**Abstract**—This paper proposes efficient VNF management method using VNF Group Table in NFV (NFV : Network Function Virtualization), which is gaining attention from many network operator. ETSI ISG NFV WG is researching NFV. It refers to concept of utilizing network function in server OS rather than the equipment. Currently, ETSI ISG WG are divided into six groups, is standardizing, but need to study on the basis of traffic classification aspects or performance metrics. Therefore, in this thesis, research is conducted to create and utilize the VNF Group Table at NFV MANO to propose efficient VNF management techniques in terms of traffic statistics from NFV management.

**Keyword**—NFV, Orchestrator, VNF, Group Table



**Chan Ho Park** received the B.E degree in Electronic Engineering from Soongsil University, Korea, in 2015. Currently, he is working for M.E. in Department of Computer Science and Engineering at Sungkyunkwan University, Korea. His research interests include SDN(Software Defined Networkin) and NFV(Network Function virtualization).



**Dong Ryeol Shin** received the B.S., M.S., and Ph.D. degrees in Electrical Engineering from the Sungkyunkwan University in 1980, the Korea Advanced Institute of Science and Technology (KAIST) in 1982, and the Georgia Institute of Technology in 1992, respectively. During 1992-1994, he had worked for Samsung Data Systems, Korea, where he was involved in the research of Intelligent Transportation Systems. Since 1994, he has been with the Department of Computer Science and Engineering at Sungkyunkwan University where he is currently a Professor in Network Research Group. His current research interests lie in the areas of mobile network, ubiquitous computing, cloud computing, and bioinformatics. And he is actively involved in the security of vehicular area networks, and the implementation and analysis of big data platform, applicable to 3D image processing of robotic arms.