

Study on Energy Performance Comparison of Information Centric Network Based on Difference of Network Architecture

Authors : Takumi Shindo, Koji Okamura

Abstract : The first generation of the wide area network was circuit centric network. How the optimal circuit can be signed was the most important issue to get the best performance. This architecture had succeeded for line based telephone system. The second generation was host centric network and Internet based on this architecture has very succeeded world widely. And Internet became as new social infrastructure. Currently the architecture of the network is based on the location of the information. This future network is called Information centric network (ICN). The information-centric network (ICN) has being researched by many projects and different architectures for implementation of ICN have been proposed. The goal of this study is to compare performances of those ICN architectures. In this paper, the authors propose general ICN model which can represent two typical ICN architectures and compare communication performances using request routing. Finally, simulation results are shown. Also, we assume that this network architecture should be adapt to energy on-demand routing.

Keywords : ICN, information centric network, CCN, energy

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