

Network Mobility Support in Content-Centric Internet

Authors : Zhiwei Yan, Jong-Hyouk Lee, Yong-Jin Park, Xiaodong Lee

Abstract : In this paper, we analyze Network MObility (NEMO) supporting problems in Content-Centric Networking (CCN), and propose the CCN-NEMO which can well support the deployment of the content-centric paradigm in large-scale mobile Internet. The CCN-NEMO extends the signaling message of the basic CCN protocol, to support the mobility discovery and fast trigger of Interest re-issuing during the network mobility. Besides, the Mobile Router (MR) is extended to optimize the content searching and relaying in the local subnet. These features can be employed by the nested NEMO to maximize the advantages of content retrieving with CCN. Based on the analysis, we compare the performance on handover latency between the basic CCN and our proposed CCN-NEMO. The results show that our scheme can facilitate the content-retrieving in the NEMO scenario with improved performance.

Keywords : NEMO, CCN, mobility, handover latency

Conference Title : ICCCN 2016 : International Conference on Communications and Computer Networks

Conference Location : Singapore, Singapore

Conference Dates : January 07-08, 2016