A Design Routing Algorithm for Management of Traffic in Content-Centric Network

Jung-Jae Kim[1], Min-Woo Ryu★[2], Si-Ho Cha[3] and Kuk-Hyun Cho[1]

[1]Dept. of Computer Science, Kwangwoon University
447-1, Wolgye-dong, Nowon-gu, Seoul 139-701, South Korea
{kjj6929, chokh}@kw.ac.kr
[2]Embedded Software Convergence Research Center, Korea Electronics Technology Institue
68, Tatap-dong, Bundang-gu, Seongnam-si, Gyeonggi-do, 463-816, South Korea
minu@keti.re.kr
[3]Dept. of Multimedia Science, Chungwoon University
113, sukgol-ro, Nam-gu, Incheon, South Korea
shcha@chungwoon.ac.kr

Abstract. Content-Centric Network (CCN) is next generation internet communication technology to provide existing internet communication paradigm as content based communication for efficient use various information in the Internet. Therefore, unlike existing internet communication technology, which focus on host based communication process, all of resource is defined as contents in CCN. Moreover it focuses on purpose of communication for using information. CCN communicate with between routers through broadcast flooding method in their network environments. This characteristic of CCN is not considering increasing network traffic about each of CCN routers. Therefore, when the requesters are rapidly increased to particular CCN router, network congestion may be occurred by broadcast traffic. Moreover, this characteristic of CCN has low turnaround time about user request due to reducing performance of network system. To resolve this problem, this paper proposes a design routing algorithm for management of traffic in CCN.

Keywords: Traffic, Content-Centric Network, Routing, Protocol, Congestion Avoidance.

1 Introduction

CCN is next generation internet communication technology to change existing internet communication paradigm as content based communication for efficient use various information in the Internet [1]. Therefore, unlike existing internet communication technology, which focus on host based communication process, all of resource is defined as contents in CCN. Moreover it focus on purpose of communication for using information. For the change of theses communication purpose, CCN communicate with each CCN router via name based routing method

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★ Corresponding author