Accepted Manuscript

Fundamental Relationship between Node Dynamic and Content Cooperative Transmission in Mobile Multimedia Communications

Dapeng Wu, Feng Zhang, Honggang Wang, Ruyan Wang

PII: S0140-3664(17)31099-X

DOI: 10.1016/j.comcom.2018.02.009

Reference: COMCOM 5647

To appear in: Computer Communications

Received date: 14 October 2017 Revised date: 23 January 2018 Accepted date: 10 February 2018



Please cite this article as: Dapeng Wu, Feng Zhang, Honggang Wang, Ruyan Wang, Fundamental Relationship between Node Dynamic and Content Cooperative Transmission in Mobile Multimedia Communications, *Computer Communications* (2018), doi: 10.1016/j.comcom.2018.02.009

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

Fundamental Relationship between Node Dynamic and Content Cooperative Transmission in Mobile Multimedia Communications

Dapeng Wu^{a,*}, Feng Zhang^a, Honggang Wang^b, Ruyan Wang^a

^a Department of Communication and Information Engineering, Chongqing University of Posts and Telecommunications, Chongqing 400065, China ^b University of Massachusetts Dartmouth.

Abstract

The traditional research on mobile multimedia communications are mostly based on transmission mechanism and relationship between the nodes, lacking of the qualitative and quantitative analyses of node dynamic such as dynamic emotion on content cooperative transmission. In this paper, we firstly excavate the influence factors of dynamic emotion, and then establish the cloud-based dynamic emotion game model to process the dynamic emotion in real time from the different time granularity. Secondly, by analyzing the dynamic emotion for a given time granularity, the steady-state emotion quantization value which represents the expected cooperative willingness to other nodes can be derived. In addition, combined with the statistical characteristics of multimedia service, we analyze the transmission characteristics of multimedia service, and then derive the influence of dynamic emotion on content cooperative transmission under the influence of the transmission characteristics of multimedia service. The numerical results show that the theoretical analysis framework can accurately reflect the dynamic emotion of nodes and the performance influence of dynamic emotion on content transmission.

Keywords: Mobile Cloud Computing; Multimedia Service; Emotional Analysis; Self-Similar; Packet Loss Rate

Email address: Email: wudapengphd@gmail.com (Dapeng Wu)

^{*}Corresponding author

دريافت فورى ب

ISIArticles مرجع مقالات تخصصی ایران

- ✔ امكان دانلود نسخه تمام متن مقالات انگليسي
 - ✓ امكان دانلود نسخه ترجمه شده مقالات
 - ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
 - ✓ امكان دانلود رايگان ۲ صفحه اول هر مقاله
 - ✔ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
 - ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات