Effective Bandwidth Utilization using Trusted LPEs in Anonymous Communication

Abstract

A network consists of autonomous systems that operate mutually for providing communication between the users. The user wants to be anonymous in this communication. The anonymous communication hides the identity of the communication parties. We propose a technique to achieve effective bandwidth utilization using trusted LPE (link processing element) in networks to deliver content from producer to consumers and hide the correspondence between them. In this technique, consumer registers interest for content by sending the Content Request Message (CRM) to the content’s producer. Here the LPE that accepts CRM from the consumers merges and processes if they are intended for the same producer. In this process LPE receives number of CRMs from consumers and creates CRM with its identity and forwards to the content’s producer as a single message. A producer produces the content requested by LPE that content send to LPE in network. Then LPE forwards content to consumers in reverse direction and duplicates into multiple content messages if necessary.

References

- Pfitzmann A and Waidner M. 1987 "Networks without use observability"
Index Terms

Computer Science
Communication

Keywords
Anonymous Communication  Lpe  Crm  Producer  Consumer