Abstract:

Data stripping and aggregation on application layer is a method to improve the usage rate of multi links by stripping and aggregating data in a specific algorithm. In this report, the multi links virtual platform is set up by using vmware virtual technique, where data stripping and aggregation could be achieved. Furthermore, a new algorithm (adaptive method) is proposed to implement the real-time data transmission. It takes advantages of the new algorithm to increase the flexibility of the dynamic link status. In addition, in order to offer a more intuitive understanding of this system, the author develops a user-friendly graphic interface to provide convenience to users. Finally, the computer simulations show that this proposed method could greatly have higher access usage rate, strip and aggregation data effectively and receive correctly.

Keyword: Data stripping and aggregation on application layer, Multi-link network, Adaptively, Virtualization technique.

应用层数据分割和聚合是一种通过固定算法在应用层分割和聚合数据，从而实现提高多链路网络利用率的一种方式。本文作者利用vmware虚拟技术搭建了多链路虚拟平台，并在该平台上设计与实现了应用层数据分割与聚合，提高了多链路网络的利用率。接着作者又提出了一种可自适应链路状况的算法并应用于实时传输数据模式，这提高了算法对链路变化的适应性。最后，作者设计了图形化界面更直观的展示了程序的结果和更友好的用户接口。

关键词：应用层数据分割和聚合，多链路网络，自适应性， 虚拟化技术