The Splitting Methods in High-speed Networks Data Analysis

Chen Xunxun[1] Fang Binxing[2] Li Lei[3]
Dept. of Computer Science, Harbin Institute of Technology
Harbin, Heilongjiang Province 150001, P. R. China
Email: {cxx[1], bxfang[2], lilei[3]}@pact518.hit.edu.cn **Tel:** 13911226679

ABSTRACT

We put forward three splitting methods in high-speed networks data analysis, which are traditional IP routing method, streams classifying based on policy routing and streams classifying based on hashing. These techniques can be used to solve the bottleneck problem of the performance in large-scale backbone networks data analysis. The result is made by continuously sampling experiments data on real networks. By slightly modified, the streams classifying method, which is designed for supporting QoS service, can be a high performance, lightweight, stable, clustered and mostly non-bursting splitting technique. This technique has high scalability and flexibility and can be improved on efficiency, complexity when combined with hashing technique.

Keywords: Splitting, Load Balance, Streams classifying, Networks Data Analysis, High-Speed Networks, Hashing