A STUDY ON P2P TRAFFIC CHARACTERISTIC EVALUATION IN THE WIDE BACKBONE

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TÓM TẮT:

In recently years, due to the increasing popularity of peer to peer (P2P) applications, such as P2P file sharing and P2P multimedia applications, P2P traffic accounts for a very high percentage of Internet traffic. As a result, P2P traffic identification is very important in network planning, security, QoS, etc. However, current P2P applications have the ability to disguise their existence through the use of arbitrary ports or payload encryption. Thus, using only payload method or statistics method is not effective for identification of P2P traffic. To increase the accuracy of P2P traffic identification, we have developed the new method which combines Port method with Payload method and flow Timeout feature, namely PPT. Our method can increase the P2P traffic detection process up to 100% in comparison with traditional methods. Using the new method, we evaluate the characteristics of P2P traffic in the WIDE (Widely Integrated Distributed Environment) backbone, the trans-Pacific backbone connect Japan and North America.