

Progress on TCP fairness achievement in IEEE 802.11 infrastructure WLAN

ABSTRACT

TCP unfairness has become pronounced in IEEE 802.11 Wireless Local Area Networks (WLANs) due to the channel access competition and congestion in between two different medium (wired and wireless). In this paper, we focus on the TCP fairness issues that review from the three aspects; fairness among flow, station and rate. Due to the strong drive towards Internet access via wireless devices, these issues must be carefully handled in order to build improved systems. We briefly review the progress and categorize the TCP fairness characteristic and then outline the problems and solutions from previous works through a comparative table. Finally, we considered the future direction for solving these problems. Overall this paper summarizes current state of knowledge of the WLAN TCP fairness.

Keyword: Fairness; Infrastructure WLAN; TCP