ATM switch: impact of heuristic approach to static bandwidth allocation

ABSTRACT

In this paper, the performance evaluation of two Asynchorous Transfer Mode (ATM) scheduler strategies, static bandwidth allocation with and without heuristic approach are presented. Several experiments were carried out by using the ON-OFF distribution source model based on the ATM Various Bit Rate (VBR) service category. The strategy with the heuristic approach improves the buffer cell loss ratio (CLR) performance significantly. Several numerical results are presented to show the effects of the heuristic approach to bandwidth allocation.

Keyword: ATM; Bandwidth allocation; VBR; Heuristic approach