IMPLEMENTATION OF STATIC THRESHOLD SCHEMES IN A GPRS RADIO RESOURCE TEMPLATE

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ABSTRACT

This paper develops a template used for comparative analysis of five popular static buffer allocation schemes – Complete Statistical-Unpacked Buffer scheme (CSBS); Reassembly Buffer sharing Scheme (RBSS); Single Buffer Sharing Scheme (SBSS); Complete Sharing Scheme (CSS); and Sharing with Minimum Allocation Scheme (SMAS) applied to General Packet Radio Service (GPRS) system. GPRS system access point was analytically modeled and simulated. A delay expression used as a common platform for the fair comparison of the schemes was also developed. The system was analyzed using QoS parameters (blocking probability, delay, loss and loss rate) for varying buffer occupancy. The analysis presented RBSS and SBSS as the schemes with the best performance.

KEYWORDS: Buffer Allocation, GPRS, QoS, Resource, Template