

The Possibilities and Limitations of the Application of the Convolution Algorithm for Modeling Network Systems

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This article verifies the applicability of the convolution algorithm for investigating multivervice network systems with different call and service streams, including non-Poissonian streams. The paper presents the results of modelling the systems with traffic streams that are state-dependent and independent.

The times between calls and times of single call service ware determined by the following distributions: exponential, uniform, gamma and Pareto. The results of modelling by convolution algorithm are compared with the results of the simulation experiments.