The General Three-Server Queueing Loss System : Discrete-Time Analysis

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Abstract

The general three-server loss system is analyzed with no restrictions on the form that the renewal type input process takes; i.e. the underlying model is based on the GI/G/3 model of queueing theory. The analysis is carried out in discrete-time leading to a compact system of equations that can be solved numerically, or in the special case Geo/Geo/3 exactly, to obtain P_{loss} values.

Keywords: Loss Systems, Queueing.