

Approximations for Non-Markovian Queueing Networks: Bibliography

Ward Whitt

IEOR Department, Columbia University

1 Introduction

2 Overall Algorithm for Queueing Networks

This is an account of my work related to the queueing network analyzer (QNA) approximation for non-Markovian networks of queues. The goal is to approximate the steady-state performance. These references do not include work on time-varying arrival rates.

2.1 QNA for Open Networks

For original 1983 papers, see [16, 17]. For a 1989 discussion of new version for manufacturing, see [9]. For more recent work on refinements, see [29].

2.2 Closed Networks

See [22, 2]. The paper [22] is the basis for using open models by the “fixed-population-mean” method.

3 Approximations for Single Queues

For study of range of possible values given the partial information of two moments, see [7, 19, 20]. For specific approximations for $GI/GI/s$ model, see [28]. For discussion of approximations for many-server queues, see [27, 31].

For heavy-traffic limits, see Chapter 9 of [30]. For refining heavy-traffic approximations, see [14].

For tail probabilities, see [1].

4 Approximations for the Flows

4.1 Approximation for Stationary Point Processes

The main paper specifying the stationary-interval method and the asymptotic method is [15]. See [13, 18] for another perspective.

For approximately characterizing dependence, see [4, 5, 6, 10]. For applications to communication networks, see [10].

4.2 Approximation for Superposition Arrival Processes

See [23] and references to papers by Susan Albin therein.

4.3 Approximation for Departure Processes

The main paper is [21]. Additional papers are [24, 25, 11, 12].

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