

Measurement-based resource allocation and on-line scheduling of differentiated services

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Abstract

We first present an overview of recent efforts in the area of measurement-based, adaptive resource allocation. Topics range from on-line measurement of “effective bandwidths” and other traffic envelopes, to constrained optimization of resources under given pricing schemes, and to issues of distributed implementation in real networks. We then turn our attention to our current work on adaptive scheduling and we discuss the on-line optimization of scheduler settings as well as the behavior of the solutions in different pricing and utility scenarios.

Joint work with George Michailidis, Department of Statistics, University of Michigan, and Peng Xu, North Carolina State University.