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PI and PIF Based Mobilizer

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Abstract

This paper introduces a novel method, called Mobilizer, of operating synchronous communication protocols in cellular mobile environment. First, we present here a distributed protocol, called Mobile Propagation of Information (MPI), for broadcasting over mobile environment. Then, we present the Mobile Propagation of Information with Feedback (MPIF) protocol, which can be used to implement this Mobilizer, i.e. enable synchronous protocols run over distributed networks with mobile users. The additional message complexity overhead, induced due to the Mobilizer, is linear with the number of users' movements.