

A Short Survey of Basic Algorithmic Problems in Distributed Ad Hoc Systems¹⁾

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Abstract. Distributed ad hoc systems are a fast growing and promising research area in computing science with multiple new applications for dynamic and mobile environments. However, constructing systems for such environments requires new algorithmic solutions. This paper presents an overview of the basic problems and algorithms for ad hoc networks. First, the formal model of an ad hoc system is shown, then the paper discusses the following topics: routing, replication and consistency with replica allocation, location management and group communication. Finally, the paper presents some further lines of investigation.

Key words: distributed ad hoc systems, routing, replication, group communication

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