عنوان مقاله:

Clustering Approach to Improve Broadcast Performance in Wireless Ad Hoc Networks

محل انتشار:

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خلاصه مقاله:

A cluster-based broadcasting algorithm for wireless ad hoc networks has been proposed. This mechanism uses a novel gateway usage approach. Dividing the broadcasting traffic to internal and external from each cluster point of view, gateway selection is just needed for the internal traffic. This simplifies the gateway selection method as well as improving the flooding performance parameters. The stability-based clustering algorithm has been used as the underlying clustering method. The stability advantage of this clustering method has been shown before by comprehensive simulations over different mobile environments. The performance parameters of the proposed broadcasting algorithm have been observed using simulations conducted over a number of environments and compared with other broadcasting methods. Results show the improvement of parameters such as broadcasting coverage as well as the number of re-broadcasts over other broadcasting algorithms.

کلمات کلیدی:

Broadcasting, clustering methods, gateways

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