A Configurable Routing Protocol For Bluetooth Wireless Networks

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Abstract

Blueweb is a self-organizing Bluetooth-based multihop network equipped with a scatternet
formation algorithm and a hybrid routing protocol. The routing protocol combines the reactive
method globally and the proactive method locally to discover the optimal path for packet transmission.
In Blueweb, the route master maintains the global topology information and each master maintains its
own N-tier routing information. In this paper, a tier number decision algorithm is used in Blueweb to
determine the optimal number of tiers for all the other masters. Our computer simulation results show
that this algorithm can efficiently improve the routing performance and reduce the routing
maintenance cost for Blueweb routing protocol.

Keyword：Bluetooth, scatternet formation, routing protocol.