A survey on cluster-based routing protocols in wireless sensor networks

ABSTRACT

In recent years, Wireless Sensor Networks (WSNs) have become interesting for a wide range of applications and a hot research area. Cluster-based routing protocols are more adequate for WSN among different types of routing protocols due to the higher energy utilization rate and being more scalable. In this study, cluster-based routing protocols have been reviewed. In addition, the advantages and objectives of this group of routing protocols are sketched out. Furthermore, several cluster-based routing protocols are analyzed in detail and compared according to the several important metrics. In conclusion, the study is summarized and finalized with some directions for future cluster-based routing protocols.