Abstract

Recent improvements in wireless communications and acoustic technology have enabled the use of sensor networks in underwater Surface. Underwater Sensor Networks is an emerging field which requires research in the field of routing and channel access. Applications Using offshore exploration, assisted navigation, Oceanographic data collection and tactical surveillance applications use underwater sensor networks. Some applications such as disaster prevention require minimum delay in data gathering. And also care must be taken to make sure that the energy expenditure of an underwater sensor node is minimal because replenishment of a sensor node is not cost-effective. Simulation results have demonstrated that information-directed routing is a significant improvement over a previously reported 3DUT algorithm, as measured by sensing quality such as localization, tracking accuracy and using Ad hoc network communication quality such as success rate in routing around sensor holes.

**Index Terms**

Computer Science  Wireless

**Keywords**

Acoustic sensor networks  Ad hoc Network  AODV Routing  Target Localization