

Research on routing protocols in Ad-hoc networks

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Abstract: This topic focuses on studying routing protocols in Ad-hoc networks—a type of non-fixed network where mobile nodes self-organize and self-manage. The practical context demands high efficiency in bandwidth and reliability for data transmission between mobile devices. The objective of the research is to propose and analyze the performance of several new routing protocols, combining both theoretical and experimental methods. The significance of this work lies in its ability to improve service quality in mobile networks without requiring fixed infrastructure, meeting the diverse needs of industries such as military, healthcare, and transportation.

Keywords: routing protocol, Ad-hoc network, mobile node, data transmission performance