## SDSR  : Secure Dynamic Source Routing Protocol

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Abstract - It has been observed from literature that an AD hoc network is a group of wireless mobile computers  (or nodes )  in which individual nodes  cooperate  by forwarding packets for each other  to allow nodes to communicate beyond direct wireless transmission range . Although a number of  secure routing protocols have  been proposed so far, all of them have certain advantages and disadvantages .  Hence, security in  AD hoc networks is still a contentious area . In this paper we first explore  the security problems in  existing routing protocols  and then we present the design and analysis  of a new secure on-demand routing protocol, called SDSR which confiscates  the problems mentioned in the existing  protocols. Moreover, unlike Ariadne, SDSR uses a very efficient broadcast authentication mechanism which does not require any clock synchronization and facilities instant authentication.