A Secure Wireless Communication Protocol using Diffie - Hellman Key Exchange

Abstract

In 1976, Diffie and Hellman in their path breaking paper [5] proposed a two party key agreement protocol based on finite field. Diffie – Hellman Key Exchange Protocol [DH protocol] has unique importance in two party wireless communication scenarios. After this protocol several protocols have been proposed bases on DH protocol but the Man in the middle attack raises a serious security concern on this protocol. Researchers have been working to overcome this security concern to design a new protocol. This paper proposes an authenticated key agreement protocol which is secure against Man in the middle attack. The authors also prove security issues of this protocol.

References


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Index Terms

Computer Science
Security
Keywords

Diffie – Hellman key agreement, Wireless Communication, Authenticated Key Agreement, Man in the Middle Attack (MITM), Security