

Comparison of RSA and NTRU Cryptosystems on Wireless Network

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Abstract

Wireless technology , by its nature , violates fundamental security principles. Wireless messages move through the free-space environment on certain spectrum allocations, it is vulnerable to security threats. Common threats include eavesdropping, unauthorized access, interference and jammimg and physical damage. To ensure the security of wireless network, Public Key Cryptography Systems are used. Moreover, wireless network needs not only security over the public air for transmission of information but also need the greater performance. So comparison of RSA and NTRU on the wireless network is needed. In this thesis, the system will present a secure wireless communication system using two well known public key cryptographic algorithms and will verify their performance for different text files of variable sizes.