

Application of digital signatures based on combining the MD5 hash algorithm and RSA encryption in electronic customs declaration procedures

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Abstract: In practice, ensuring the integrity and security of information in electronic transactions has become extremely important. This topic focuses on the application of digital signatures based on the combination of the MD5 hash algorithm and RSA encryption to improve the electronic customs declaration process. The objective is to build an effective security system to ensure the integrity, accuracy, and security of information in customs transactions. The research method includes theoretical and experimental analysis to evaluate the feasibility of the proposed solution. The expected result is a highly secure electronic customs declaration system that enhances work performance and meets increasingly stringent customs management requirements.

Keywords: electronic signature, MD5 hash algorithm, RSA encryption, electronic customs declaration