Licensing System for Ministry of Transportation using Digital Signature and Blowfish Algorithm

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Abstract

Nowadays, online processing is increasing day by day and security plays important role in online processing, especially in the area of government processes. There are several security algorithms already presented. Among these algorithms, digital signature is widely used in authentication process and identification of owner. This system proposed an approach for secured online vehicle annual licensing process using digital signature for authentication and blowfish symmetric algorithm for data encryption. Digital Signature is used to assign the documents in order to safe communication and verifying the right owner and real documents and certificates. In the process of annual licensing processes, documents need to send over the communication channel. There may be unauthorized access of the documents and modification of the documents while sending over the communication channel. In order to avoid above problems, documents are assigned using digital signature and Blowfish symmetric algorithm is used to encrypt the signed documents. Blowfish is simple encryption algorithm and key can be any length up to 448 bits. It is suitable for applications where the keys does not

change often, like a communication link or an automatic document encryptor. It is significantly faster than most encryption algorithms when implemented on 32-bit microprocessors with large data caches.