

Common Key Cryptosystem

Cryptography And Authentication

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1 - 1. Common key cryptosystem

Common key cryptosystem

A chipher in which the key used for encryption and decryption are the same.

Also called secret key cryptography or symmetric key cryptography.

The encryption of a message(m) (plaintext) with a secret key(s) is reposedented as follows.

$$c = \text{Enc}(s, m)$$

The decryption of a message with a secret key is represented as follows.

$$m = \text{Dec}(s, c)$$

1 - 2. Type of common key cryptosystem

There are 2 types of common key cryptosystem.

- ① Stream cipher
- ② Block cipher

1 - 3. Stream cipher

1 - 4. Block cipher