

Технологии 2004

Информационно-телекоммуникационные технологии

**INFORMATION AND BANK SYSTEMS
CORRESPONDENTS AUTHENTICATION BASED
ON VIRTUAL IDENTIFIERS SHAPING**

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Fast progressing development of information and computer technologies opens a new qualitative level of possibilities for the further bank system. Unfortunately, these possibilities implementation efficiency today collides with a lot of problems which threatens operation of the bank system. Main of these problems is bank information authentication quality lowering at magnification of computer technologies part during its handling. The argument for this is constant growth of the system correspondents identifier unauthorized access threats that re-

cently appears. The situation is complicated that existing approaches to authentication problem realization are not capable to provide given problem decision..

Carried out authors researches in the field of practical implementation of absolute undeciphering capability conditions show, that the given problem may be solved by using the approach consisting in virtualization of identifiers bands sample spaces. It is supposed, that the bank system uses 2 sorts of identifiers: virtual and working. Virtual identifiers are for correspondents and are formed by them. A feature of the prospective approach is that sample spaces of virtual identifier bands X^* is continuous, therefore its infinite entropy ($H[X^*] = \infty$) is ensured for the unauthorized user. Passage from the continuous form of identifiers sample space to the discrete form, mandatory in the bank system, is carried out by using of the authentication program complex developed and patented by authors (fig. 1)



Figure 1.

The basis of the complex operation is definition of an average information content and articulation. Numerical values of these parameters combination may be used as the working identifier. Two complex operations modes are supposed: 1) working identifier creation mode; 2) authentication mode.

Key features of the offered approach are:

1) For the authorized access of the correspondent to the bank system only the virtual identifier which is formed by the correspondent in analogue mode independently is used. It absolutely eliminates possibility of a fake imitation.

2) The working identifier is used only as the measurement standard for matching that removes necessity of its special protection.

3) The correspondent operatively may change the virtual identifier, representing the working identifier appropriate to him in bank.

The offered approach and its implementation opens the newest **area** of the bank system perfecting in a direc-

tion of unauthorized access to the bank information security.

Given results are obtained during researches spent by writers at support of Russian federation Education Ministry T02-03.1-816

**INFORMATION TECHNOLOGY OF
SCRAMBLING METHODS QUALITY RATING
ESTIMATION**

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Even common acquaintance with a modern status of researches in the field of audioinformation security methods effectiveness analysis reveals enough dangerous situation consisting in common approach to given class problems solution lack for today. It naturally entails vari-