COMMUNICATION SECURITY IN REMOTE CONTROLLED
COMPUTER SYSTEMS

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ABSTRACT

Nowadays remote controlled computer systems are in widespread use. Several systems use the communication facilities offered by the public switched telephone network. In view of the public aspects of the network it is necessary that dial-up systems should have sufficient access security and communication security. In this paper it is proposed that this security be provided by the use of cryptography.

KEY WORD INDEX

Communication security, cryptography, remote control.

INTRODUCTION

Major applications of cryptography include the securing of information in information processing and in information communication systems. In this world of growing concern about privacy and integrity of information in which multi-user systems, communication systems and communication facilities are in common use, it is necessary that there should be a better protection against the several kinds of unintended use of systems and facilities.

The value of the information and the risks involved may be determinative of the level of protection of information systems. In general, the use of cryptography only is not the ultimate solution to provide security. Several other ways of protection may be involved as well. Some of the aspects involved can be determined by an adapted layered model (fig. 1).

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In a part of the present paper this layered model will be used as a guide to discuss the subject of securing a remote controlled computer system.