Abstract

A new method for software program protection by information sharing & authentication
technique is proposed. In this scheme we will share a secret source program among a group of participants. Each of them holds a camouflage program to hide a share. Each camouflage program will hold a secret source program, thus resulting in stego-program. Each stego-program will still be compiled and executed to perform its original functionality. The security will be further enhanced by encrypting source program with secret key which not only can prevent the secret program from being recovered illegally but also can authenticate the stego-program provided by each participant. The secret program will only be recovered when all the participant supplies correct stego-program and correct key. During the recovery process we can check the stego-program have been tempered or not incidentally/ intentionally. This scheme can be applied to software programs for copyright protection, secret hiding in software program for covert channel, etc.

References

- S. Lee, and W. H. Tsai, “Covert Communication with Authentication via Software Programs Using Invisible ASCII Codes”

Index Terms

Computer Science
Emerging Trends in Technology

Keywords

Authentication  information sharing  invisible ASCII control codes  program sharing
secret program

security protection

software program