Proposing Enhanced E-Mail Security Mechanism (EEMSM) for Reducing Cyber Crimes

Abstract

Now a days, Criminals use various methods for launching sophisticated attacks via internet. Most commonly e-mail channel is preferred by the attackers for launching phishing attacks by sending fake or junk emails. As authors studied due to absence of privacy, authentication and integrity of email message somewhere SMTP (Simple Mail Transfer Protocol) lacks security. So, for making more secure email communication channel, authors designed a new methodology “EEMSM” that is named as Enhanced E-Mail Security Mechanism whose function is to provide “Content Base Encryption” (CBE) on a simple mouse button click on email body before sending email to receiver end. The working of EEMSM is based on the type of encryption algorithm applied on the type of content carried by email body viz. text based content, image based content and audio/video based content etc. The motive of this new designed methodology is to keep data safe or private from the third party without data stolen on the time of data sending on the network. That ultimately helps to improve email body content security on the network. This paper also discusses about the current scenario used by the G-mail for sending E-mail. And at the end, authors compares how new designed methodology provides
more secure results than the present scenario.

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Index Terms

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Keywords

Cybercrime, phishing, attacks, attackers, email, encryption algorithm, Content based encryption.