A computer program product comprising: a computer usable medium having computer readable program code means embodied therein for encrypting and decrypting information transferred over a network between a client application program running in a client computer and a server application program running in a server computer, the computer readable program code means in the computer program product comprising: computer readable program code means for providing a socket application program interface to an application layer program; computer readable program code means for providing encrypted information to transport protocol layer services; computer readable program code means for encrypting information received from an application layer program; and computer readable program code means for decrypting information received from transport protocol layer services.