

# Secure Data Encryption Algorithm

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An Instant Messaging Software that sends and receives information securely through a network such as the internet using a secure algorithm was created. This software is comprised of two parts: a multilayer encryption algorithm and an Instant Messaging Software. These programs were created using the programming language C++ on the compiler Borland Builder 6. The Instant Messaging Software consists of a server and a client. The server is installed onto one computer and manages all client connections. The client computers are linked to the server through a network. The multilayer encryption algorithm encrypts the data that is being sent from the clients and also decrypts the data that is received from the server. The multilayer encryption algorithm comprises a multilayer architecture which consists of a plurality of various secure encrypted algorithms that use a combination of mathematical and text based encryption. The structure of the algorithm is dynamic in that its architecture allows the addition and manipulation of the layers of encryption as needed. This algorithm also has no encryption keys or excess data being sent within message through the network. This system provides an effective way to transport sensitive private data over existing non-secure networks without the overhead and limited security associated with traditional VPN solutions.