Data Flow Diagram of Secured Messaging Application

Sender/Receiver

Plain Text →

← Plain Text

Message Encryption/Decryption

Encrypted Message →

← Encrypted Message

Server

Encrypted Message →

← Encrypted Message

Message Encryption/Decryption

PlainText →

← Plain Text

Sender/Receiver

Public Key

X3DH

Shared Private Key for communication

Ciphertext (Sender to Receiver)/ Plain Text (Receiver to Sender)

AES

UserAccounts, Encrtypted Message logs

Ciphertext (Sender to Receiver)/ Plain Text (Receiver to Sender)

Process

Public Key

X3DH

Shared Private Key for communication