**WHATSAPP ENCRYPTION**

**How does end-to-end encryption work?**

WhatsApp's end-to-end encryption ensures that only you and the person you're communicating with can read what's sent. Nobody in between, not even WhatsApp, can read the messages. The messages are secured with locks, and only the recipient has the special key to unlock and read the messages. WhatsApp uses Signal Protocol developed by Open Whisper Systems.

The following steps describes the working of E2EE when two people communicate on WhatsApp.

1. When the user first opens the WhatsApp, two different keys (public & private) are generated. The encryption process takes place on the phone itself.
2. The private key must remain with the user whereas the public key is transferred to the receiver via the centralised WhatsApp server.
3. The public key encrypts the senders message on the phone even before it reaches the centralised server.
4. The server is only used to transmit the encrypted message. The message can only be unlocked by the private key of the receiver. No third part, including WhatsApp can intercept and read the message.
5. If a hacker tries to hack and read the messages, they would fail because of the encryption.

**How do I verify that WhatsApp is using end-to-end encryption?**

To manually verify the encryption between the sender and the receiver, simply tap on the contacts name on WhatsApp to open the info screen.  Now tap on 'Encryption' to view the QR code and 60-digit number. You can scan your contacts' QR code or visually compare the 60-digit number. If you scan the QR code, and if they match, then your chats are encrypted and no one is intercepting your messages or calls.

**CentOS**

CentOS is a Linux distribution derived from the Red Hat Enterprise Linux. Because it is free, CentOS Linux is widely popular with Linux users, web hosts and small businesses. However, as with most free things, you do give up something. In this case, there is no direct CentOS support services offered by the CentOS team. So before you select CentOS for your next project, there are a few things you should know about using CentOS Linux.

CentOS is a repackaged version of Red Hat Enterprise Linux. The CentOS team is a volunteer group that repackages publicly available RHEL source packages into binaries. The software is then distributed through various public mirrors. To my knowledge, there is no direct relationship or partnership between CentOS and Red Hat. The lack of this formal relationships has created problems in the past, such as a when Red Hat demanded all Red Hat brandingbe removed from CentOS.

While there are a number of companies that support CentOS Linux, there is no official, commercial support service. With RHEL, you get support directly from Red Hat. With CentOS, you rely on the community or IT consultants for commercial CentOS support.