



# DENCRYPT CONNEX

## SECURE MOBILE COMMUNICATION

Connex protects your smartphone conversations with state-of-the-art Dynamic Encryption over non-secure digital infrastructure such as WiFi hotspots, mobile networks and satellite links. Connex is a user-friendly smartphone application featuring end-to-end encrypted voice and messages. The app is delivered from app stores or a Mobile Device Management system.

### FEATURES



Dynamic Encryption



User-friendly



Enterprise or Cloud solution

#### Security

- » Dynamic Encryption + AES-256
- » End-to-end encryption
- » Perfect Forward Secrecy
- » Trusted connections using TLS1.2
- » Secure storage of chat history
- » Encrypted push notifications
- » Secure provisioning

#### Functionality

- » Encrypted voice calls
- » Encrypted instant messaging (IM)
  - » Text, photos, audio, location
  - » Time-constrained IM
- » Group calls and messaging
- » Excellent audio quality
- » Individual, centrally managed contact list

#### Managed Application

- » Dencrypt Control Center (web interface):
  - » Call group management
  - » Feature configuration
  - » Certificate management incl. revocation

#### Connectivity

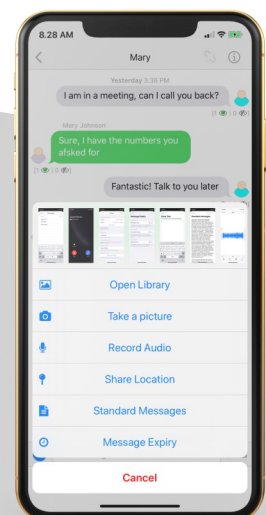
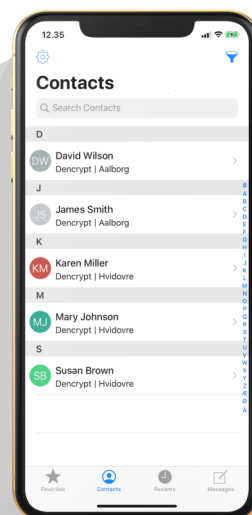
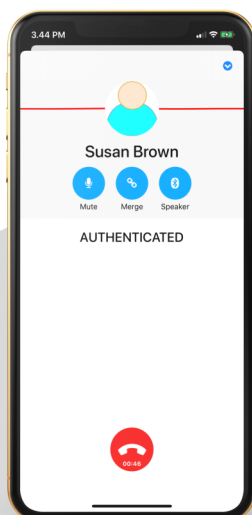
- » 3G/4G/5G/WiFi

#### Platforms

- » iOS, Android

#### Certifications

- » Common Criteria EAL4+ALC-FLR.2 (ultimo 2020)



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## Technical Specifications

### Voice & Data Encryption

Secure end-to-end encrypted voice and message communication using patented Dynamic Encryption ensuring that each call and message is encrypted with a randomly chosen algorithm and randomly chosen keys.

#### Voice

- » AES-256 + Dynamic Encryption in GCM, 384-bits
- » Key exchange over DTLS-SRTP:
  - » Cipher suite: TLS\_ECDHE\_RSA\_WITH\_AES\_256\_GCM\_SHA384
  - » Elliptic curve: secp384r1

#### Messages in Transit

- » AES-256 + Dynamic Encryption in GCM, 384-bits
- » Key exchange over X3DH + Double Ratchet
- » Elliptic curve: X448

#### Messages at Rest

- » AES-256 + Dynamic Encryption in GCM, 640-bits
- » Dual-keys stored on device and server
- » Key exchange over mutually authenticated TLS1.2

#### Push Notifications

- » AES-256 in CFB
- » Key exchange over mutually authenticated TLS1.2

### Mutually Authenticated Connections

Connex registers in the Dencrypt Server System for provisioning, call setup and phonebook download using mutual authenticated connections.

- » TLS1.2 Cipher Suite:
  - » TLS\_ECDHE\_RSA\_WITH\_AES\_256\_GCM\_SHA384
  - » Elliptic curve: secp384r1
  - » Authentication: RSA 3072 bits

### Dencrypt Server System

The Dencrypt Server System is available as an Enterprise solution for on-premises installation or as a cloud service managed by Dencrypt.

### Connectivity

Voice-over-IP calls and messaging over cellular, wireless and satellite networks, including 3G/4G/5G/WiFi.

### Audio

- » Constant bit-rate for enhanced security
- » Speex and Opus audio codec for excellent audio quality

### Platforms

- » iOS 12.0 and later
- » Android 9.0 or later

