

# Columbitech Mobile VPN

## Android Application SDK



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The Columbitech Mobile VPN Application SDK for Android is a software library, enabling developers to seamlessly include mobility and security features into any application made for the Android platform. The SDK provides session persistence and FIPS140-2 validated cryptographic protection to any type of application communicating over Wi-Fi, 3G or 4G networks.

The API library is written in ANSI C with additional components in Java, making it easy to use for software developers.

The Application SDK for Android is composed of the following modules and can be combined to provide complete or partial Mobile VPN functionality:

- *eClient – Embedded Client Module*  
Main module initiating and controlling other modules
- *eWTLS – Embedded Wireless TLS Module*  
Includes the security layer responsible for encryption, decryption, integrity controls and certificate validation. This module includes DTLS and WTLS and is mandatory.
- *eWVPN – Embedded Wireless VPN Module*  
Handles the internal WVPN-protocol, which controls user authentication and performs data compression. This module is mandatory.
- *eConfig – Embedded Configuration Module*  
Enables easy configuration of the client using a standard text file format. This module is optional and can be replaced by any custom-made configuration.
- *eTRUDP – Embedded Tiny Reliable UDP Module*  
Makes it possible for small devices to use a reliable transport protocol over UDP, and is typically used when TCP is not feasible as the transport layer. This module is optional.
- *eCrypt – Embedded Cryptographic Module*  
Stand alone library containing security algorithms such as AES symmetric encryption, RSA for asymmetric encryption and SHA-1 for secure hashing. This module is written in both optimized C and assembler code; it is optional and designed to make it easy to replace one or more algorithms with external implementations.
- *Open source components*  
The OpenSSL component contains implementations of security algorithms and protocols used by the eWTLS and eWVPN modules. Lightweight IP (LWIP) is an open source TCP/IP stack that provides a socket interface simplifying the use of existing socket code implementations.

### Specification overview

- Available for iPad and iPhone applications running Android version 2.2 and up
- Utilizes the Android simulator for simplified software development
- Also available for iOS, Linux, Windows and MacOS (additional platforms on request)
- Uses only static memory with no need for dynamic memory allocation
- Memory efficient – typically uses less than 64 Kbytes

### More information

For availability and pricing details, please call +1 866 855 1874 (North America) or +46 8 556 08 100 (Sweden) or e-mail [info@columbitech.com](mailto:info@columbitech.com) or