NCP
SECURE COMMUNICATIONS ■

Next Generation Network Access Technology

Universal IPsec VPN Clients for Android 4.x

- ▶ **Compatible with all VPN Gateways (IPsec standard)**
- ▶ **Import configurations from 3rd party products**
- ▶ **Fallback IPsec / HTTPS (VPN Path Finder Technology)**
- ▶ **FIPS Inside**
- ▶ **Strong authentication**
- ▶ **Multi certificate support**
- ▶ **Reconnect mode (Always On)**
- ▶ **Android version 4.0 and later**
- ▶ **No need to "root" the operating system**
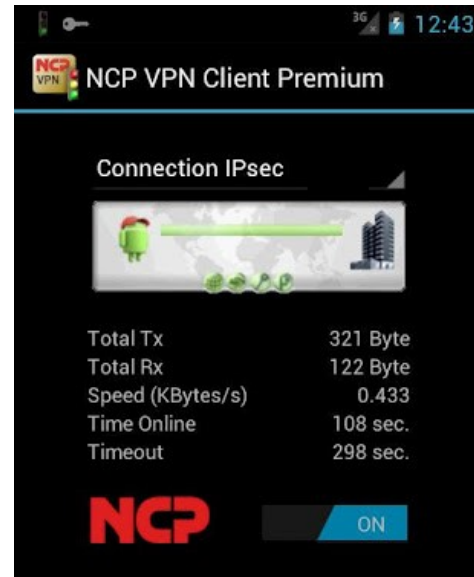
Universally Applicable

The NCP Secure Android Clients enable a highly secure Virtual Private Network (VPN) connection to the corporate networks of companies or organizations. Access to multiple networks is supported, each connection being defined by its own VPN profile.

Using standard IPsec protocols, connections can be established from tablets and smartphones to the VPN gateways of all well-known manufacturers.

Auto reconnect provides permanent remote access to central resources and information.

NCP Path Finder Technology enables remote access even when the device is located behind firewalls or proxies that would otherwise hinder the establishment of an IPsec tunnel.

Security

The strong authentication of the NCP Secure Android Client Premium for Android provides comprehensive protection against access by unauthorized third parties.

Data encryption: support for OTP (One Time Password) tokens and certificates in a PKI (Public Key Infrastructure). "Multi certificate support" enables VPN connections between the one device and different companies, even when each company demands an individual user certificate.
The embedded cryptographic module is validated according to FIPS 140-2 (Certificate #1747), Implementation Guidance section G.5.

Usability and Cost Effectiveness

The intuitive, graphical user interface not only makes NCP Secure Android Clients "easy to use", but also keeps the user continuously updated on the state and security level of the connection, both while the VPN is established and while it is disconnected.

Detailed logs help to ensure rapid support from the help-desk in the event of unforeseen problems. Usability, in turn, means cost savings as less training and documentation are required, and the load on the help-desk is reduced.

The Client is available in one of two variants:

- ▸ NCP Secure VPN Client for Android
- ▸ NCP Secure VPN Client Premium for Android

The Premium variant incorporates a broader set of functions (see next page).

In addition to these two variants, available via the Google Play Store, NCP also offers two Enterprise VPN Clients for Android. These support central management or central license distribution and are available from NCP's distributors.

Technical Features

Technical Features	NCP Secure VPN Client	Premium VPN Client	
Operating System	✓	✓	Android 4.0 and above
Standards	✓	✓	Support of all Internet Society IPsec Standards
Virtual Private Networking	✓	✓	IPsec (Layer 3 Tunneling), RFC conformant; IPsec proposals can be determined by the IPsec Gateway (IKE, IPsec Phase 2); Event log; Communication only in tunnel; MTU Size Fragmentation und Reassembly; DPD; NAT-Traversal (NAT-T); IPsec Tunnel Mode
Encryption	✓	✓	Symmetric processes: AES 128,192,256 bits; Blowfish 128,448 bits; Triple DES 112,168 bits; Dynamic processes for key exchange: RSA to 2048 bits; Seamless Rekeying (PFS); Hash Algorithms: SHA-256, SHA-384, SHA-512, MD5, DH Groups 1, 2, 5, 14-18
FIPS Inside FIPS 140-2 Inside	–	✓	The NCP Secure VPN Client Premium for Android uses an embedded FIPS 140-2-validated cryptographic module (Certificate #1747) running on an Android platform per FIPS 140-2 Implementation Guidance section G.5 guidelines. FIPS conformance will always be maintained when any of the following algorithms are used for establishment and encryption of the IPsec connection: ▶ Diffie Hellman Group: Group 2 or higher (DH starting from a length of 1024 bits) ▶ Hash Algorithms: SHA1, SHA 256, SHA 384 or SHA 512 bits ▶ Encryption Algorithms: AES with 128, 192 or 256 bits or Triple DES
Authentication Process	✓	✓	IKEv1 (Aggressive und Main Mode), Quick Mode; XAUTH for extended user authentication; IKE Config Mode for the dynamic assignment of a virtual address from an internal pool (private IP) ; PFS
	–	✓	IKEv2
	✓	✓	Pre-Shared Secrets
Strong authentication	–	✓	PKCS#12 Interface for private key in soft certificates Multi Certificate configuration
	✓	✓	One-Time Passwords and Challenge Response System; RSA SecurID Ready
Network Protocol	✓	✓	IP
Auto Reconnect	–	✓	A connection is automatically established if the Internet connection has been interrupted or the communication medium has changed from WiFi to mobile data transmission.
	–	✓	Configurable connection mode (always, manual)
VPN Path Finder NCPPATH FINDER	–	✓	NCP VPN Path Finder Technology, Fallback IPsec /HTTPS (Port 443) when port 500 or UDP encapsulation can not be used (prerequisite: NCP VPN Path Finder Technology required at the VPN Gateway)
IP Address Assignment	✓	✓	DHCP (Dynamic Host Control Protocol); DNS: central VPN gateway selection using public IP address allocated by querying a DNS server
Line Management	✓	✓	DPD (Dead Peer Detection) with configurable polling interval; Short Hold Mode; WLAN-Roaming (Handover); Timeout
Data Compression	✓	✓	IPCOMP (lzs), Deflate
Other Features	✓	✓	UDP encapsulation
	✓	✓	Import function supporting file formats:*.ini, *.pcf, *.wgx und *.spd
Internet Society RFCs and Drafts	✓	✓	RFC 2401 –2409 (IPsec), RFC 3947 (NAT-T negotiations), RFC 3948 (UDP encapsulation), IP Security Architecture, ESP, ISAKMP/Oakley, IKE, XAUTH, IKECFG, DPD, NAT Traversal (NAT-T), UDP encapsulation, IPCOMP

Client Monitor Intuitive GUI	✓	✓	English; Connection control and management, connection statistics, log files; trace tool for error diagnosis; traffic light icon indicates connection status

Further information about the NCP Secure Android Client is available from:
http://www.ncp-e.com/en/products/ipsec-vpn-client-for-android.html

You can purchase the NCP Secure Android Client Premium from the Google Play-Store:
NCP Secure VPN Client Premium Android: https://play.google.com/store/apps/details?id=de.ncp.vpn.premium
NCP Secure VPN Client Android: https://play.google.com/store/apps/details?id=de.ncp.vpn.basic