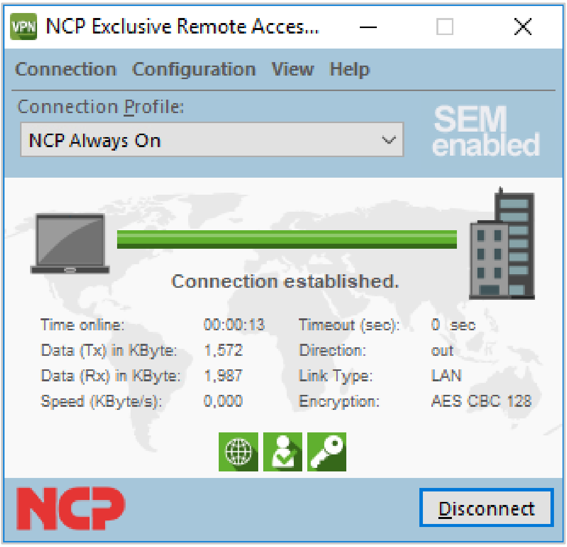
Data Sheet
NCP Exclusive Remote Access Client Windows

Centrally Administrable VPN Client Suite for Windows

- For Juniper SRX Series
- Central Management
- Microsoft Windows 11, 10, 8.x
- Dynamic Personal Firewall
- VPN Bypass
- VPN Path Finder Technology (Fallback IPsec/HTTPS)
- FIPS Inside
- Strong Authentication (e.g., Certificate), Biometrics
- Quality of Service Support
- Multi Certificate Support
- Support for 3G / 4G Hardware



Connection Profile: NCP Always On

Connection established.

Time online: 00:00:13
Data (Tx) in KByte: 1,572
Data (Rx) in KByte: 1,987
Speed (KByte/s): 0,000
Timeout (sec): 0 sec
Direction: out
Link Type: LAN
Encryption: AES CBC 128

Universality and Communications

The NCP Exclusive Remote Access Client is part of the NCP Exclusive Remote Access Solution for Juniper SRX Gateways. The VPN client is only available with NCP Exclusive Remote Access Management. Use the NCP Exclusive Client to establish secure, IPsec-based data links from any location in the world to Juniper SRX gateways; connection establishment over all networks is totally independent of any Microsoft dialer software.

NCP's "VPN Path Finder Technology" enables remote access even when the computer is located behind a firewall or proxy that would otherwise hinder the establishment of an IPsec tunnel; "Path Finder" automates the changeover to a modified IPsec protocol mode that uses the available HTTPS port for the VPN tunnel.

To enable employees to securely log on to the Windows domain before logging on to the Windows system, the client supports domain logon using a credential service provider after establishing a VPN connection to the company network. The user then logs on to the local Windows system through this VPN connection so that the connection is authenticated in the central Windows domain or Active Directory. Secure logon to a Wi-Fi HotSpot is also supported in the pre-logon phase which means the client is optimally protected by the integrated dynamic firewall while logging on to the HotSpot. It makes no difference to the user whether they are in the office or a connected via a HotSpot.

Security

The NCP Exclusive Remote Access Client also provides additional security mechanisms such as the integrated, dynamic Personal Firewall.

Rules for ports, IP addresses, IP subnets and applications can be defined centrally by the administrator. Based on predefined values for these security rules, "Friendly Net Detection" detects whether the user's computer is located in a friendly or an unknown network. The corresponding Firewall rule is activated, dependent on the network detected, and similarly, when connecting to a hotspot, especially when logging on to and off from the Wi-Fi network. In contrast to normal firewalls, the NCP Firewall starts to work as soon as the computer is booted.

Other security features include support for One-Time Password (OTP) solutions and Certificates in a Public Key Infrastructure (PKI).

Furthermore, the VPN client features biometric authentication before the VPN connection is established, for example via fingerprint or face recognition. Authentication takes place directly after clicking the Connect button in the client GUI, and the connection is not established until authentication is completed. If hardware for biometric authentication is not present or enabled, the user can also authenticate via their password.

When the Home Zone feature is activated, a special user profile is used for the home office network. Users just need to click the Home Zone button and the correct network configuration is made automatically. This includes special firewall rules set up by administrators which only apply when the user is in their home office. This means that users can access their printer or scanner in the home office network. If the user leaves the Home Zone, the existing firewall rules are reactivated.

The Quality of Service feature reserves bandwidth for configured applications such as VoIP. Outgoing data from selected data sources on the end device can be prioritized in the VPN tunnel. For the user, this means stable VoIP communication through the VPN tunnel even with high data volumes.

The new bypass function in the NCP VPN Client allows the IT administrator to configure the client so that certain applications are exempted from the VPN and the data is sent over the Internet even when split tunneling is disabled. This has the advantage that applications such as video streaming no longer overwhelm the server with terabytes of data.

"Multi Certificate Support" enables VPN connections between the one computer and different companies, even when each company demands an individual user certificate. "Multi Certificate" enables a number of certificate settings to be defined and then individually allocated to specific connection profiles.

FIPS: the embedded cryptographic module is validated according to FIPS 140-2 (certificate #1747).

In the extreme case, all Secure Client parameter settings can be blocked by the administrator, preventing the user from making any changes: alternatively, certain situation specific parameters can be individually unblocked ensuring that all situations can be suitably catered for.

Ease of Use and Cost Effectiveness

Ease of use and central administration serve to make the NCP Exclusive Remote Access Client unique on the market. The Secure Client's integrated dialer automatically establishes the connection to the Internet, and media type detection always selects the fastest available communication network while starting to establish the VPN tunnel. The Secure Client's intuitive graphical user interface (GUI) keeps the user updated on the state of the network and its security level, before and during a VPN connection. Detailed logs help to ensure rapid support from the helpdesk in the event of unforeseen problems, and a configuration wizard simplifies creation of profiles. The Secure Client supports Wi-Fi/WLAN (Wireless Local Area Network) and WWAN (Wireless Wide Area Network, 2G, 3G, 4G). The mobile wireless network configuration, including Access Point Name (APN), is derived automatically from the SIM card being used, together with the details of the corresponding mobile wireless provider.

This is particularly beneficial when working abroad; the user is free to purchase and use a SIM card from the most cost-effective local provider.

The Budget Manager enables the most economic operation; volume or time budgets or providers can be defined and monitored.

The Secure Client's GUI includes a freely configurable area for displaying the customer logo or support notice, and the GUI itself is designed for barrier free operation, with support for the operation of a screen reader.

Central Management

The NCP Exclusive Remote Access Management provides a "Single Point of Administration" for the rollout, commissioning and administration of NCP Exclusive Remote Access Clients (precondition for the use of the NCP Exclusive Remote Access Clients).

Operating Systems	Windows 10, 8.x, 7 (on x86 or x86-64 Processor architecture)
Juniper SRX/vSRX OS	Junos OS 15.1X49-D80 or higher is required
Security Features	The Enterprise Client supports all major IPsec standards in accordance with RFC

Personal Firewall
Firewall Configuration*
	Stateful Packet Inspection;
	IP-NAT (Network Address Translation);
	Friendly Net Detection (Firewall rules adapted automatically if connected network recognized based on its IP subnet address, the DHCP server's MAC address or an NCP FND Server*);
	Start FND dependent action;
	Secure hotspot logon;
	Home Zone;
	Differentiated filter rules relative to: protocols, ports, applications and addresses, LAN adapter protection, IPv4 and IPv6 support, Central administration

VPN Bypass	The VPN Bypass function allows the administrator to define applications which can communicate over the Internet directly despite disabling split tunneling on the VPN connection. It is also possible to define which domains or target addresses can bypass the VPN tunnel.
Virtual Private Networking	IPsec (Layer 3 Tunneling), RFC-conformant; IPsec proposals can be determined through the IPsec gateway (IKEv1/IKEv2, IPsec Phase 2); Event log; communication only in the tunnel; MTU size fragmentation and 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-1, SHA-256, SHA-384, SHA-512, MD5, DH group 1,2,5,14-21, 25-30
FIPS Inside	The IPsec Client incorporates cryptographic algorithms conformant with the FIPS standard. The embedded cryptographic module incorporating these algorithms has been validated as conformant to FIPS 140-2 (certificate #1747). FIPS conformance will always be maintained when any of the following algorithms are used for establishment and encryption of the IPsec connection: ▪ DH Group: Group 2 or higher (DH starting from a length of 1024 Bit) ▪ Hash Algorithms: SHA1, SHA 256, SHA 384, or SHA 512 Bit ▪ Encryption Algorithms: AES with 128, 192 and 256 Bit or Triple DES
Authentication Processes	IKE (Aggressive Mode and Main Mode, Quick Mode); XAUTH for extended user authentication; IKEv2 IKE config. mode for dynamic assignment of a virtual address from the internal address pool (private IP); PFS; PAP, CHAP, MS CHAP V.2; IEEE 802.1x: EAP-MD5 (Extensible Authentication Protocol): Extended authentication relative to switches and access points (Layer 2); EAP-TLS (Extensible Authentication Protocol - Transport Layer Security): Extended

	authentication relative to switches and access points on the basis of certificates (Layer 2); support of certificates in a PKI: Soft certificates, smart cards, and USB tokens and certificates with ECC Multi-certificate configuration, Pre-shared secrets, one-time passwords, and challenge response systems (e.g. RSA SecurID ready)
Strong Authentication	X.509 v.3 Standard; biometric Authentication (Windows 8.x or higher) PKCS#11 interface for encryption tokens (USB and smart cards); smart card operating systems: TCOS 1.2, 2.0 and 3.0; smart card reader interfaces: PC/SC, CT-API; PKCS#12 interface for private keys in soft certificates; CSP for the use of user certificates in the windows certificate store PIN policy; administrative specification for PIN entry in any level of complexity; revocation: EPRL (End-entity Public-key Certificate Revocation List, formerly CRL), CARL (Certification Authority Revocation List, formerly ARL), OCSP.
PKI Enrollment*	CMP* (Certificate Management Protocol)
Networking Features	LAN emulation: Ethernet adapter with NDIS interface, full WLAN (Wireless Local Area Network) and WWAN (Wireless Wide Area Network, Windows 7 Mobile Broadband) support
Network Protocol	IPv4 / IPv6 Dual Stack
Dialers	NCP Internet Connector, Microsoft RAS Dialer (for ISP dial-in via dial-in script)
VPN Path Finder	NCP Path Finder Technology: Fallback IPsec/ HTTPS (port 443) if port 500 respectively UDP encapsulation is not possible
IP Address Allocation	DHCP (Dynamic Host Control Protocol), DNS: Dial-in to the central gateway with changing public IP addresses through IP address query via DNS server
Communication Media	Internet, LAN, Wi-Fi, GSM (incl. HSCSD), GPRS, 3G, LTE, HSDPA, PSTN
Line Management	DPD with configurable time interval; Short Hold Mode; Wi-Fi roaming (handover); Channel Bundling (dynamic in ISDN) with freely configurable threshold value; Timeout (controlled by time and charges); Budget Manager; Connection Modes: automatic, manual, variable (reconnection dependent on how previous disconnect invoked)
APN from SIM Card	APN (Access Point Name) defines access point of a mobile data connection at a provider. If user changes provider, system automatically uses APN data from SIM card to configure Secure Client
Data Compression	IPCOMP (lzs), deflate
Quality of Service	Prioritization of configured outgoing bandwidth in VPN tunnel.
Additional Features	UDP encapsulation, WISPr-support, IPsec-Roaming, Wi-Fi roaming, Split Tunneling
Point-to-Point Protocols	PPP over ISDN, PPP over GSM, PPP over Ethernet; LCP, IPCP, MLP, CCP, PAP, CHAP, ECP

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; RFC 7427: IKEv2-Authentication (Padding-method)
Client Monitor Intuitive, Graphical User Interface	Multilingual (English, German); Intuitive operation; Configuration, Connection Management and Monitoring, Connection Statistics, Log-files, Internet availability test, Trace Tool for error diagnosis; Traffic light icon for display of connection status; Integrated support of Mobile Connect Cards, embedded); Client Monitor can be tailored to include company name or support information; Password protected configuration management and profile management, configuration parameter lock
Update with SEM	To update the client software the following plugins are required: ▪ License Plugin: Version 12.00 ▪ Client Configuration Plugin: Version 12.00 ▪ Firewall Plug-in: Version 12.00 Update Client: Version 7.0

*) If you wish to download NCP's FND server as an add-on, please click here:
https://www.ncp-e.com/en/resources/download-vpn-client.html

More information: https://www.ncp-e.com/en/exclusive-remote-access-solution/vpn-client/

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