

Nokia Mobile VPN

for Mobile Devices

NOKIA

Nokia for Business

Today's business challenges require users to stay connected to their offices while traveling. Accessing intranet web pages, internal Wikis, blogs or team-room applications is often a business requirement.

Using VPN for Mobile Devices

Nokia Mobile VPN Client provides the necessary access using standards-based Internet Protocol Security (IPSec) VPN technology. This allows users to click on a link to an intranet web page embedded in an email that is received by the always-on email solution—Mail for Exchange for Nokia devices. Nokia Mobile VPN Client provides intranet access transparently for the user, authenticating the session using digital certificates or by adhering to username/password authentication infrastructures with RSA SecurID token or Active Directory/LDAP-based schemes.

Nokia Mobile VPN Client is an interoperable and manageable IPSec VPN client that enables users to access compatible business intranet and extranet services from mobile devices that are optimized for business use. It offers protected access to business applications, and provides a single point of security management for an increasing number of mobile employees and devices.

Nokia Mobile VPN Client enables employees to connect to the business network virtually anytime, anywhere.

Central management of security policies and updates over the air provides uninterrupted service to mobile workers. Management is based on the Open Mobile Alliance Device Management (OMA DM) protocol, and any device management server that follows OMA DM specification can be used to install the client, to deploy VPN policies and X509v3 certificates.

Intranet Browsing

Nokia E66 and Nokia E71 devices come equipped with an intranet application that makes intranet web browsing easier than ever before. This application creates VPN access points automatically when needed, establishes a Nokia Mobile VPN connection and launches a web browser to a pre-defined intranet web page. The intranet application also supports silent web, single sign-on in environments that support NTLM

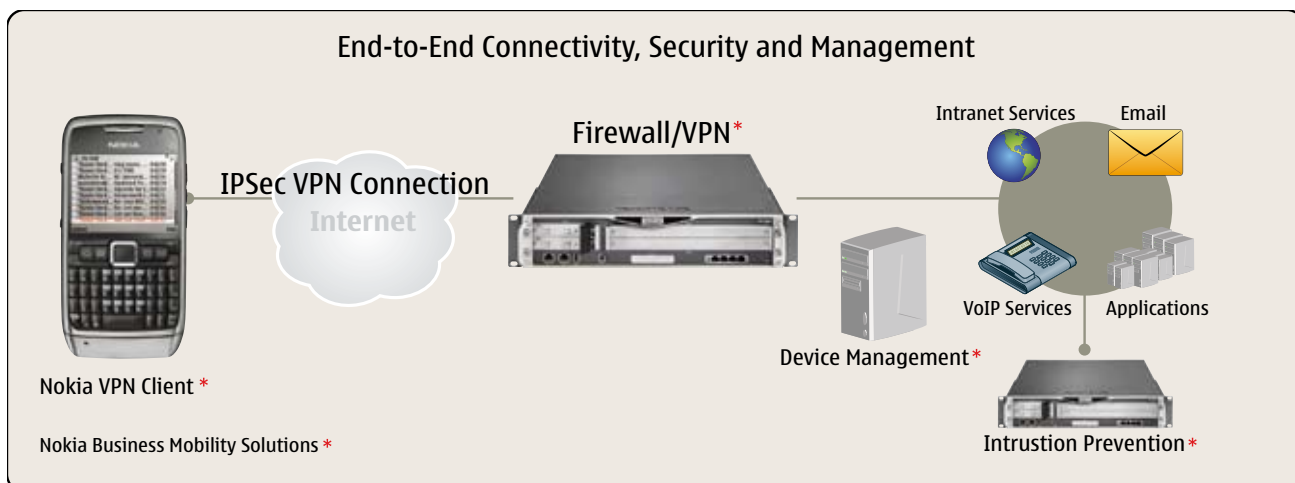
authentication (Nokia E66/Nokia E71 PR2 feature). Intranet access can be smooth and silent as there are no username/password queries.

Nokia Mobile VPN Client

Nokia Mobile VPN Client is an IPSec Virtual Private Network (VPN) application developed by Nokia for Symbian OS-based mobile devices. An IPSec VPN allows a user to use the mobile network and the Internet to safely connect from the mobile device to the company network. Once authentication to the company VPN is successful, data travels encrypted to and from the mobile device and is received just as the sender sent it. IPSec also protects against electronic data theft because attackers are unable to capture data when it is sent or received and then retransmit it later.

Deploying and Managing Nokia Mobile VPN Client

For small-scale deployments, Nokia Mobile VPN Client can be set up through the user interface on the device. A complimentary policy tool for Nokia Mobile VPN Client can be used to create VPN policy and to attach optional certificates into a VPN policy bundle. The created policy bundle can be delivered to a device using Nokia PC Suite or via a memory card, a USB drive, or an Infrared or Bluetooth connection. Once the policy is delivered to the device, VPN implementation is just a click away.



A device management server that follows OMA Device Management specification can be used to install, configure, and continuously manage not only the VPN client but application settings such as email and the web browser (e.g., to add links to intranet pages for the company). Device management can also be used to define WLAN/Wi-Fi access points to provide a full range of intranet access options to the end-user. Using OMA Device Management interface to do over-the-air deployment offers superior consumer experience for end-users—seamlessly, reliably, and without user intervention.

Key Features

The key features of Nokia Mobile VPN Client include the following:

- Empowers a mobile worker to reliably access network services from email and intranet browsing, to corporate VoIP services
- Supports S60 3rd Edition Feature Pack 1 (and newer) on compatible devices, including Nokia E90 Communicator, Nokia E51, Nokia E66, Nokia E71, and more

- Integration to Internet access point selection using VPN access points
- Support for IPsec over Network Address Translation (NAT)
- Support for split-tunneling
- Support for internal addressing and DNS
- Support for OMA DM for automatic policy updates
- Support for automatic certificate enrollment via OMA DM
- Support for manual configuration using the device's user interface (UI)
- Supported VPN gateways:
 - Nokia IP VPN Gateway
 - Check Point VPN-1 NGX
 - Cisco ASA and VPN Concentrator
 - Alcatel-Lucent VPN Gateways

Encryption Algorithms

- DES (56 bits), 3DES (168 bits), AES (128, 192, 256 bits)
- SHA1, MD5 hash algorithms for encryption

User Authentication

- X.509v3 digital certificates for authentication
- CRACK for legacy authentication
- Username/Password (RADIUS)
- Token cards
- IKE preshared secret
- GSM Subscriber Identity Modules (SIMs) via EAP-SIM
- Third Generation authentication and key agreement via EAP-AKA (requires USIM application on the smart card)

Public Key Algorithms

- Diffie-Hellman 768-1536 bits (Groups 1, 2, and 5)

Key Management

- IKE (ISAKMP/Oakley) – main, aggressive
- PKCS#8 for private key format, PKCS#5 v2 for private key encryption
- PKCS#12 for importing private key and certificate
- Perfect Forward Secrecy (PFS) for IPsec associations

Learn more about Nokia Mobile VPN Client at www.nokia.com/mobilevpn.

Work together. Smarter.

Nokia Inc. 102 Corporate Park Drive, White Plains, NY 10604 USA

Americas Tel: 1 877 997 9199 • Email: usa@nokiaforbusiness.com

Asia Pacific Tel: +603 9145 1032 • Email: asia@nokiaforbusiness.com

Europe France +33 170 708 166 • UK +44 161 601 8908 • Email: europe@nokiaforbusiness.com

Middle East and Africa Dubai +971 4 3697600 • Email: mea@nokiaforbusiness.com

www.nokiaforbusiness.com

NI3 105 040

© 2008 Nokia. All rights reserved. Nokia, Nokia Connecting People, Eseries, E51, E66, E71, and E90 are trademarks or registered trademarks of Nokia Corporation. Microsoft and Mail for Exchange are trademarks of the Microsoft group of companies. Check Point, the Check Point logo, VPN-1, and FireWall-1 are trademarks, service marks, or registered trademarks of Check Point Software Technologies Ltd. Other product and company names mentioned herein may be trademarks or trade names of their respective owners. THIS DOCUMENT IS PROVIDED FOR INFORMATIONAL PURPOSES AND IS NOT WARRANTED TO BE ERROR-FREE, NOR IS IT SUBJECT TO ANY OTHER WARRANTIES OR CONDITIONS, WHETHER EXPRESSED ORALLY OR IMPLIED IN LAW, INCLUDING IMPLIED WARRANTIES AND CONDITIONS OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Nokia and Microsoft specifically disclaim any liability with respect to this document, and no contractual obligations are formed either directly or indirectly by this document. Under no circumstances shall Nokia or Microsoft be responsible for any direct, special, incidental, consequential, or indirect damages howsoever caused. Nokia operates a policy of ongoing development and may make changes to products and their specifications without prior notice.



Nokia for Business