

Nokia SSL VPN Solution

Nokia 50s

Small business is now competing in several areas that were once restricted to larger companies. The flexibility and agility of smaller businesses gives them the advantage of faster reaction time. However, when it comes to technology infrastructure, small businesses often lack the budget and resources to implement the kind of solutions that large corporations are accustomed to.

In the fast-paced, dynamic environment in which small businesses operate, remote access solutions are becoming a key component of daily business operations. In order to meet the remote access needs unique to small businesses, Nokia has created a highly cost-effective, fully integrated gateway designed to provide secure, authenticated and controlled access to business applications and resources from virtually any desktop, notebook or handheld device. Designed with the small business in mind, this Nokia SSL VPN delivers a flexible

and easy-to-manage solution for small businesses.

Since deploying laptops to the bulk of employees could be cost-prohibitive especially in a small business environment, Nokia SSL VPN offers support for a wide range of remote devices from company issued laptops to personal PCs and handheld devices. The solution takes into consideration the lack of large or dedicated IT staff who are readily available to install and troubleshoot remote access issues. For this reason, Nokia SSL VPN is simple to install and maintain.

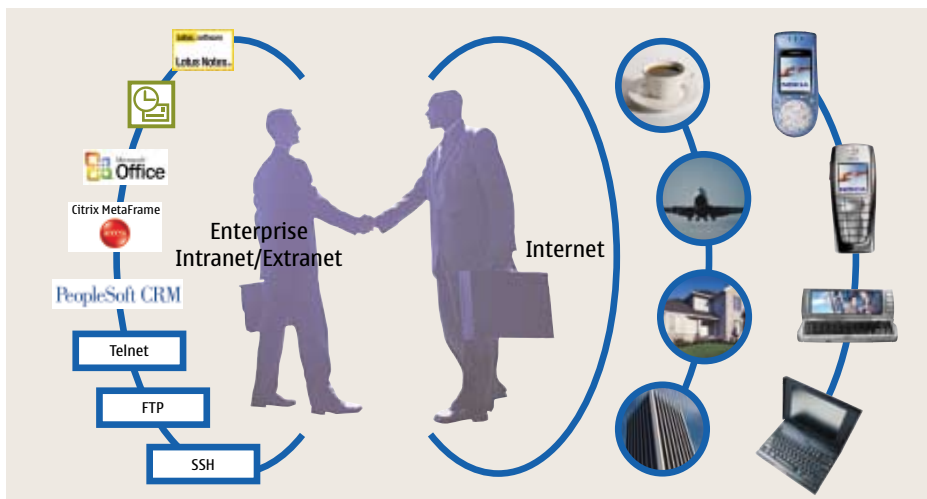
Even more susceptible to attacks than larger companies, small businesses require a remote access solution that meets their security requirements. With Nokia SSL VPN, administrators can easily configure the gateway to automatically control the resources and applications made available to specific users and groups of users. In




addition to the user credentials, remote session information such as the type of remote device and security of the device can also be factored into the authorization process. This fine level of authorization allows employees, partners and customers to securely access the company resources only appropriate for their individual needs.

The capability to support applications natively on the remote device as well as via web browser allows the deployment of Nokia SSL VPN for virtually all remote access scenarios. For use with company-deployed laptops, the user experience can be identical to traditional IPsec solution but with the underlying technology based on SSL. For use on non-enterprise devices, remote users can leverage the web browser interface and be assured that any confidential data inadvertently left behind will automatically be removed.

Nokia SSL VPN is backed by award winning Nokia First Call—Final Resolution global support and services.



Technical specifications

Authentication <ul style="list-style-type: none"> Local password RADIUS LDAP NT Domain NIS Client Certificates Dual-factor authentication Dual authentication w/certificates Active Directory Support for Kerberos authentication with Microsoft Active Directory 	Firewall Client Support <ul style="list-style-type: none"> Norton/Symantec McAfee Microsoft Windows XP SP2 Zone Alarm
Client Device Security Assessment <ul style="list-style-type: none"> Client Integrity Scan Flexible script support Advanced Access Control End-point Security GUI-based configuration 	Anti-Virus Client Support <ul style="list-style-type: none"> McAfee Corporate McAfee Enterprise Norton Anti-Virus Norton Anti-Virus Corporate Trend OfficeScan NT Kaspersky AV
Encryption <ul style="list-style-type: none"> RSA 3DES AES RC4 DES RC2 	Native Application Support <ul style="list-style-type: none"> Port-Forwarding Proxy via Java Port-Forwarding Proxy via ActiveX Auto-launch of Port-Forwarding Proxy Support for Dynamic Application Tunneling Virtually all IP-based applications (TCP and UDP) w/Secure Connector (SSL Client) Local Proxy Auto-launch of Local Proxy
Standards/Protocol Support <ul style="list-style-type: none"> HTTP HTTPS HTML Java Applets Java Scripts Microsoft Windows CIFS Unix NFS FTP SMTP POP IMAP ActiveX 	SSL Client <ul style="list-style-type: none"> Downloadable Client for Windows, Mac and Linux OS Secure Connector – “Layer 3” connectivity
Local Data Security <ul style="list-style-type: none"> Virtual Drive – Encrypted Data Storage Auto-encryption via AES 1GB capacity Continuous anti-virus engine monitoring 	Data Confidentiality – Secure Workspace <ul style="list-style-type: none"> Web browser cache removal Web browser history removal Web browser cookie removal Auto removal of new files “Smart” Copy-Paste control Print disable Resilient during unexpected system crash
Remote Device Web Browser Support <ul style="list-style-type: none"> Microsoft Internet Explorer 5.5+ Netscape 6.2x & 7.x Mozilla 1.7.2 FireFox 1.0 	User-Selectable Multi-Language Support <ul style="list-style-type: none"> English Japanese Simplified Chinese Traditional Chinese Korean German Spanish French Brazilian Portuguese
Remote Device OS Support <ul style="list-style-type: none"> Microsoft Windows 98 Microsoft Windows ME Microsoft Windows NT 4.0 Microsoft Windows 2000 w/SP4 Microsoft Windows XP w/SP2 Microsoft Windows Server 2000 Microsoft Windows 2003 Linux – RedHat 9.x & Enterprise Symbian 7.0 OS (Series 80) Microsoft PocketPC 2003 	Reliability and Scalability <ul style="list-style-type: none"> Hardened Nokia IPSO OS High Availability via VRRP Built-in load sharing/state sharing to provide scalability and fail-over
Application Server Support <ul style="list-style-type: none"> Microsoft Exchange 2003 Microsoft Exchange 2000 Lotus Notes 6.5.x Lotus 6.0.x Citrix MetaFrame rel3 XPE Citrix MetaFrame rel3 XPS Windows Terminal Services 2000 	Management <ul style="list-style-type: none"> Web-based management interface
Application Client Support <ul style="list-style-type: none"> Microsoft Outlook 2003 Microsoft Outlook 2000 Lotus Client 6.5.x Lotus Client 6.0.2 Outlook Web Access 6.5 Outlook Web Access 6.0 INotes 6.5.x INotes 6.0.x Citrix Nfuse 1.8, 1.9, 2.0 XPE Windows Remote Desktop (Java & ActiveX) Oracle 9 Oracle 10 Microsoft SQL Server 2000 Microsoft SQL Server 2003 	Nokia 50s  <ul style="list-style-type: none"> Upgradeable to 50 or 100 concurrent users Dimensions: W 8.15" x H 1.60" x D 15.95" (20.70 cm x 4.06 cm x 40.51 cm) Weight: 7.7 lbs. (3.5 kg) w/o mounting bracket Temperature: 5°C to 40°C Four 10/100 Ethernet ports 512 MB RAM SSL encryption accelerator 10 concurrent user license

NIA 038 014
 Copyright © 2005 Nokia. All rights reserved. Nokia and Nokia Connecting People are registered trademarks of Nokia Corporation. Other trademarks mentioned are the property of their respective owners. Nokia operates a policy of continuous development. Therefore we reserve the right to make changes and improvements to any of the products described in this document without prior notice.

European Customer Enquiry Numbers

France +33 170 708 166

Germany +49 692 222 203 68

Italy +39 236 003 652

Spain +34 914 140 777

Sweden +46 856 610 789

UK +44 161 601 8908

mobile.business.emea@nokia.com

www.nokia.com



Nokia SSL VPN Solution

Nokia 105s



Nokia for Business



Designed specifically for enterprises, Nokia SSL VPN provides secure, authenticated and controlled access to enterprise intranets and extranets from virtually any device. Based on award winning Nokia IP Security Platforms and pre-hardened Nokia IPSO™ operating system, Nokia 105s is an SSL-based remote access gateway that delivers highly cost-effective, flexible and easy to manage solutions to enterprises.

Enterprises have long since recognized the benefit of remote access solutions. However, they must now cope with the widespread broadband Internet access and availability of sophisticated wireless devices. Enterprises are no longer satisfied with the limitations on productivity that remote employees have faced with legacy remote access solutions. Instead, many enterprises

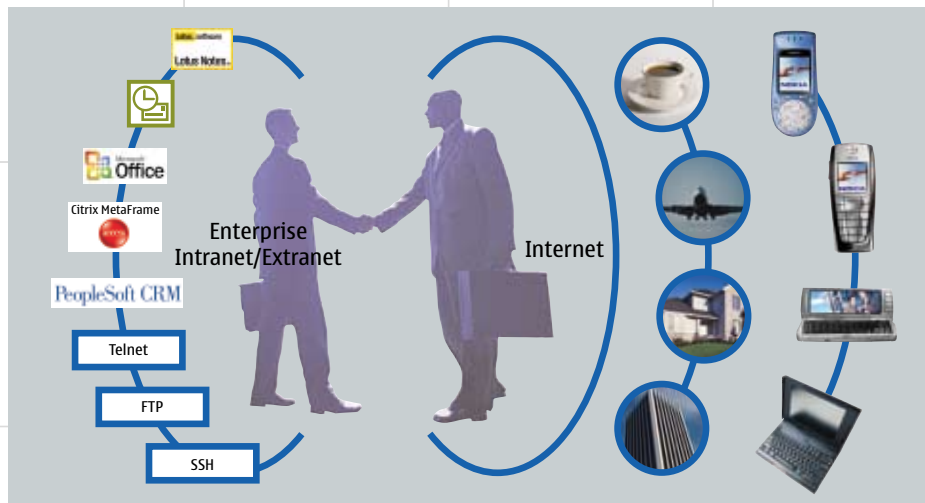
require solutions that enable employees to be just as productive while away from the office as when in corporate facilities. A robust solution that can leverage the available device in almost any location can certainly increase the benefits of remote access to a new level. Such a solution, however, must provide the necessary security features to ensure the integrity of the enterprise network, enforce granular level of user access rights and protect data confidentiality of individual users.

As part of a mobile connectivity solution offered by Nokia, Nokia 105s provides robust SSL-based remote access for enterprises. Designed to easily integrate into existing enterprise network, Nokia SSL VPN can readily support users already defined in LDAP and Active Directory.

Once installed, administrators can easily configure the access privileges of individual users by including the users in multiple groups with differing resource access rights.

The access privileges can be dynamically changed based on the properties of the remote access session—such as the type of remote device being used, how secure that device is and what authentication method was used. This allows remote employees to read email from an internet cafe or kiosk but not access mission critical applications or download sensitive documents for example. These same employees, when accessing the corporate network using a company laptop, can be granted greater access privileges.

Designed for ease of serviceability, Nokia 105s exhibits a front pullout tray that offers a simple serviceability option without removing the appliance from the rack. Furthermore, the long history of Nokia platform reliability coupled with high availability results in a highly reliable solution. Nokia SSL VPN is backed by Nokia First Call—Final Resolution global support and services.



NOKIA
Connecting People

Technical Specifications

<p>Authentication</p> <ul style="list-style-type: none"> Local password RADIUS LDAP NT Domain NIS Client Certificates Dual-factor authentication Dual authentication w/certificates Active Directory Support for Kerberos authentication with Microsoft Active Directory <p>Client Device Security Assessment</p> <ul style="list-style-type: none"> Client Integrity Scan Flexible script support Advanced Access Control End-point Security GUI-based configuration <p>Encryption</p> <ul style="list-style-type: none"> RSA 3DES AES RC4 DES RC2 <p>Standards/Protocol Support</p> <ul style="list-style-type: none"> HTTP HTTPS HTML Java Applets Java Scripts Microsoft Windows CIFS Unix NFS FTP SMTP POP IMAP ActiveX <p>Local Data Security</p> <ul style="list-style-type: none"> Virtual Drive – Encrypted Data Storage Auto-encryption via AES 1GB capacity <p>Browsers</p> <ul style="list-style-type: none"> Internet Explorer version 6.0 on Win2k SP4 and WinXP SP2 Firefox 1.0.7 Mac OS X 10.4 Safari Nokia Series S80 Platforms (Nokia 9300, Nokia 9500) <p>Client Operating Systems</p> <ul style="list-style-type: none"> Windows XP Professional SP2 with hotfixes Windows 2000 SP4 with hotfixes Mac OS X 10.4 RedHat Enterprise Linux version 4 <p>Email Servers</p> <ul style="list-style-type: none"> Exchange 2003 Exchange 2000 Lotus Notes 6.5.x <p>Other Application Servers</p> <ul style="list-style-type: none"> Citrix Metaframe rel3 Xpe 1.0 FR3, SP3 Citrix Presentation Server 3.0 Microsoft ISA Proxy Server Windows Terminal Services 2000 Windows Terminal Services 2003 <p>Email Clients</p> <ul style="list-style-type: none"> Outlook 2003 Outlook 2000 Lotus Client 6.5.x Outlook Web Access 6.5 Outlook Web Access 6.0 iNotes 6.5.x <p>Other Client Software</p> <ul style="list-style-type: none"> Citrix Nfuse 4.0 (web interface) Windows Remote Desktop: tsWeb, Win2k, and XP <p>Firewall Client Support</p> <ul style="list-style-type: none"> Norton/Symantec McAfee Microsoft Windows XP SP2 Zone Alarm 	<p>AntiVirus (for Client Integrity Scanning and Endpoint Security)</p> <ul style="list-style-type: none"> McAfee Corporate 4.5.1, 7 and 8 McAfee Consumer (VirusScan) 8 and 9 Norton AV 2004 Norton AV Corporate 7.6 and 9.0 Trend OfficeScan NT <p>Native Application Support</p> <ul style="list-style-type: none"> Port-Forwarding Proxy via Java Port-Forwarding Proxy via ActiveX Auto-launch of Port-Forwarding Proxy Support for Dynamic Application Tunneling Virtually all IP-based applications (TCP and UDP) w/Secure Connector (SSL Client) Local Proxy Auto-launch of Local Proxy Tunneling <p>SSL Client</p> <ul style="list-style-type: none"> Downloadable Client for Windows, Mac and Linux OS Secure Connector – “Layer 3” connectivity <p>Data Confidentiality – Secure Workspace</p> <ul style="list-style-type: none"> Web browser cache removal Web browser history removal Web browser cookie removal Auto removal of new files “Smart” Copy-Paste control Print disable Resilient during unexpected system crash <p>User-Selectable Multi-Language Support</p> <ul style="list-style-type: none"> English Japanese Simplified Chinese Traditional Chinese Korean German Spanish French Brazilian Portuguese <p>Reliability and Scalability</p> <ul style="list-style-type: none"> Hardened Nokia IPSO OS High Availability via VRRP Built-in load sharing/state sharing to provide scalability and fail-over <p>Management</p> <ul style="list-style-type: none"> Web-based management interface <p>Base System Configuration</p> <ul style="list-style-type: none"> 1GB System RAM, expandable to 2GB 4 integrated 10/100/1000 Ethernet interfaces Integrated PCMCIA slot <p>Optional PMC Cards</p> <ul style="list-style-type: none"> 4-port 10/100 BASE-TX, copper 2-port 10/100/1000 BASE-T, copper 2-port 1000 BASE-SX, MMF <p>Dimensions</p> <ul style="list-style-type: none"> Height – 1.75 in (4.4 cm) – 1U Width – 17 in (43.2 cm) without mounting brackets – 1U; or 19 in (48.2 cm) with mounting brackets Depth – 17 in (43.2 cm) Depth – 17.5 in (44.5 cm) at handles, standard bracket position Weight – 18 lbs (8.2 kg) with mounting brackets Front access for upgrades and maintenance <p>Power Requirement</p> <ul style="list-style-type: none"> AC Input 100-120V / 200-240V Frequency 50 / 60 Hz AC Input Current 3A
---	--

European Customer Enquiry Numbers

France +33 170 708 166
 Germany +49 692 222 203 68
 Italy +39 02 36003652
 Spain +34 914 140 777
 Sweden +46 856 610 789
 UK +44 161 601 8908

mobile.business.emea@nokia.com
 www.nokiaforbusiness.com



Nokia SSL VPN Solution

Nokia 500s

Designed specifically for enterprises and service providers, Nokia SSL VPN provides secure, authenticated and controlled access to enterprise intranets and extranets from virtually any device. Based on the award winning Nokia IP Security Platform and pre-hardened Nokia IPSO™ operating system, Nokia 500s is an SSL-based remote access gateway that delivers the performance, manageability, availability, flexibility, security, and scalability that large enterprises demand in remote access solutions.

While remote access solutions continue to be an intricate part of enterprise network infrastructures, they pose a unique challenge for IT administrators. Multiple organizations, multiple office locations, global field personnel, legacy applications, and multi-national employees, partners and customers are some of the factors that must be considered for enterprise remote access

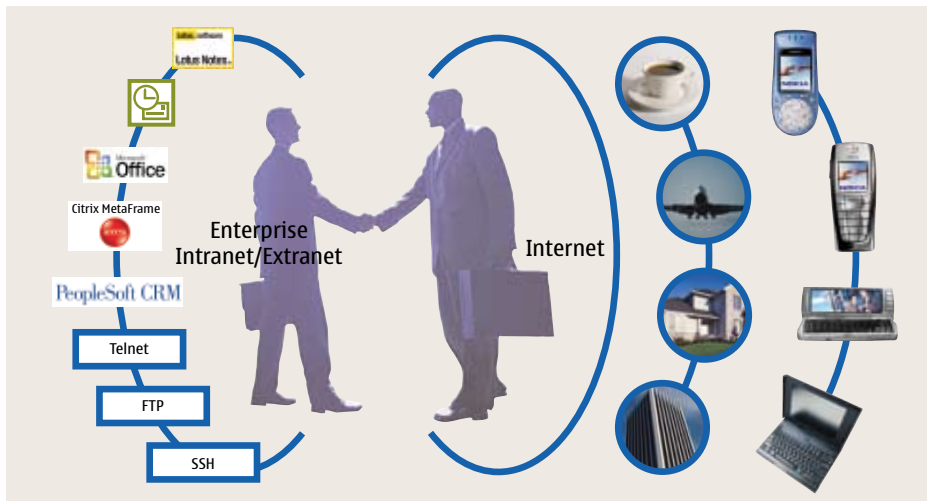
deployments. Deploying a robust remote access solution that can satisfy the long list of requirements is a challenge for any team of IT administrators. Hence, it is not uncommon for enterprises to support multiple versions of remote client software, different types of enterprise-deployed devices, and various network infrastructures such as dial-up, cellular, wireless, and other broadband accesses.

Nokia 500s has been designed specifically for enterprises and service providers offering a robust solution for remote access to enterprise applications and critical resources. While offering the most flexible solution with the support for a wide range of remote access devices, it is designed to meet the very stringent requirements typically found in large enterprise environments. Advanced Access Control, dual authentication, multi-language support, support of virtually any IP-based




application, Secure Workspace and encrypted data storage are just a few of the features offered by Nokia 500s.

Not overlooking the high availability requirements of most enterprises, Nokia 500s has been designed with uninterruptible service in mind. The highly redundant component design of the Nokia 500s, long history of Nokia platform reliability along with the support for various high availability configurations offer one of the most reliable solutions available in the market. Nokia SSL VPN is backed by award-winning Nokia First-Call—Final Resolution global support and services.



Technical specifications

Authentication <ul style="list-style-type: none"> Local password RADIUS LDAP NT Domain NIS Client Certificates Dual-factor authentication Dual authentication w/certificates Active Directory Support for Kerberos authentication with Microsoft Active Directory 	Firewall Client Support <ul style="list-style-type: none"> Norton/Symantec McAfee Microsoft Windows XP SP2 Zone Alarm
Client Device Security Assessment <ul style="list-style-type: none"> Client Integrity Scan Flexible script support Advanced Access Control End-point Security GUI-based configuration 	Anti-Virus Client Support <ul style="list-style-type: none"> McAfee Corporate McAfee Enterprise Norton Anti-Virus Norton Anti-Virus Corporate Trend OfficeScan NT Kaspersky AV
Encryption <ul style="list-style-type: none"> RSA 3DES AES RC4 DES RC2 	Native Application Support <ul style="list-style-type: none"> Port-Forwarding Proxy via Java Port-Forwarding Proxy via ActiveX Auto-launch of Port-Forwarding Proxy Support for Dynamic Application Tunneling Virtually all IP-based applications (TCP and UDP) w/Secure Connector (SSL Client) Local Proxy Auto-launch of Local Proxy
Standards/Protocol Support <ul style="list-style-type: none"> HTTP HTTPS HTML Java Applets Java Scripts Microsoft Windows CIFS Unix NFS FTP SMTP POP IMAP ActiveX 	SSL Client <ul style="list-style-type: none"> Downloadable Clients for Windows, Mac and Linux OS Secure Connector – “Layer 3” connectivity
Local Data Security <ul style="list-style-type: none"> Virtual Drive – Encrypted Data Storage Auto-encryption via AES 1GB capacity 	Data Confidentiality – Secure Workspace <ul style="list-style-type: none"> Web browser cache removal Web browser history removal Web browser cookie removal Auto removal of new files “Smart” Copy-Paste control Print disable Resilient during unexpected system crash
Remote Device Web Browser Support <ul style="list-style-type: none"> Microsoft Internet Explorer 5.5+ Netscape 6.2x & 7.x Mozilla 1.7.2 FireFox 1.0 	User-Selectable Multi-Language Support <ul style="list-style-type: none"> English Japanese Simplified Chinese Traditional Chinese Korean German Spanish French Brazilian Portuguese
Remote Device OS Support <ul style="list-style-type: none"> Microsoft Windows 98 Microsoft Windows ME Microsoft Windows NT 4.0 Microsoft Windows 2000 w/SP4 Microsoft Windows XP w/SP2 Microsoft Windows Server 2000 Microsoft Windows 2003 Linux – RedHat 9.x & Enterprise Symbian 7.0 OS (Series 80) Microsoft PocketPC 2003 	Reliability and Scalability <ul style="list-style-type: none"> Hardened Nokia IPSO OS High Availability via VRRP Built-in load sharing/state sharing to provide scalability and fail-over
Application Server Support <ul style="list-style-type: none"> Microsoft Exchange 2003 Microsoft Exchange 2000 Lotus Notes 6.5.x Lotus 6.0.x Citrix MetaFrame rel3 XPE Citrix MetaFrame rel3 XPS Windows Terminal Services 2000 	Management <ul style="list-style-type: none"> Web-based management interface Nokia Voyager
Application Client Support <ul style="list-style-type: none"> Microsoft Outlook 2003 Microsoft Outlook 2000 Lotus Client 6.5.x Lotus Client 6.0.2 Outlook Web Access 6.5 Outlook Web Access 6.0 INotes 6.5.x INotes 6.0.x Citrix Nfuse 1.8, 1.9, 2.0 XPE Windows Remote Desktop (Java & ActiveX) Oracle 9 Oracle 10 Microsoft SQL Server 2000 Microsoft SQL Server 2003 	Nokia 500s  <ul style="list-style-type: none"> Upgradeable to 1,200 concurrent users Dimensions: W 19" x H 3.46" x D 21.15" (48 cm x 8.79 cm x 53.72 cm) Weight: 36 lbs. (16 kg) Four 10/100 Ethernet ports Nokia Encryption Accelerator IV 500 concurrent users

NI4 040 004
 Copyright © 2005 Nokia. All rights reserved. Nokia and Nokia Connecting People are registered trademarks of Nokia Corporation. Other trademarks mentioned are the property of their respective owners. Nokia operates a policy of continuous development. Therefore we reserve the right to make changes and improvements to any of the products described in this document without prior notice.

European Customer Enquiry Numbers

France +33 170 708 166

Germany +49 692 222 203 68

Italy +39 236 003 652

Spain +34 914 140 777

Sweden +46 856 610 789

UK +44 161 601 8908

mobile.business.emea@nokia.com

www.nokia.com

