VPN/Internet Security Solutions

VPN

The NetVanta™ 2000 Series

www.adtran.com/netvanta2000

ADTRAN®

The NetVanta™ 2000 Series from ADTRAN.

A Complete VPN and Firewall Solution.

Why VPN?

VPN is a high-speed connectivity option for connecting remote offices, telecommuters, and mobile users over Internet or IP-based networks, without the security concerns previously associated with shared networks. There are at **least four good reasons to implement a Virtual Private Network** (VPN) as part of your wide area internetworking plan.

1. **You are currently using leased line connections,** and are seeking to reduce the recurring costs of those circuits. Industry estimates indicate that you can significantly lower recurring monthly costs using VPN technology.

2. **The type of leased line service you need is not available in the area**, or you cannot get service quickly enough. A plug-and-play VPN appliance can have you up and running over the Internet in no time.

3. **You are looking for a more cost-effective way to support telecommuters.** Using a small VPN appliance connected to standard DSL, cable or ISDN Internet access, your user gains reliable, inexpensive access to business-critical resources, without incurring long-distance dial-up charges.

4. **Your business is currently using low-speed public telephone services** to support communications. VPN offers the opportunity to upgrade to a higher performance network, easily and cost-effectively.

In any case, how do you implement this powerful, cost-effective internetworking tool? Using the NetVanta 2000 Series from ADTRAN.

The NetVanta 2000 Series At-A-Glance

- Secures communication over Internet and IP networks
- Standards-based VPN gateways include integrated firewall
- Stateful inspection firewall protects against cyber attacks
- Internal router supports multiple users
- Data Encryption Standard (DES) or 3DES secures data
- Internet Key Exchange (IKE) authenticates users
- Network Address Translation (NAT) conceals private IP addresses
- Web-based configuration and management simplifies network control
- Reliable pre- and post-sales support extends product value
- Reassuring five-year warranty for complete peace of mind

The power to secure your VPN network.

ADTRAN's NetVanta 2000 Series delivers the exact VPN functionality you need to connect remote offices, telecommuters, and mobile users to corporate information resources, securely and cost-effectively. Backed by a full five-year warranty and unsurpassed technical support from the leading maker of internetworking solutions, the NetVanta 2000 Series is one of the most risk-free decisions you can make for VPN.

NetVanta 2000 Internetworking Solutions

NetVanta 2400

Corporate Host Gateway

- IPSec VPN tunneling
- Stateful inspection firewall
- DMZ port for public server access
- Hardware encryption accelerator
- Built-in router
- 10/100 BaseT Ethernet interfaces
- Web-based or front panel configuration
- Up to 1,000 private encrypted tunnels
- Unrestricted users

NetVanta 2300

Midsize Host/Branch Office Gateway

- IPSec VPN tunneling
- Stateful inspection firewall
- DMZ port for public server access
- Hardware encryption accelerator
- Built-in router
- 10/100 BaseT Ethernet interfaces
- Web-based configuration
- Up to 100 private encrypted tunnels
- Unrestricted users

Concerned about security on public networks?

Secure communication across public networks is what the NetVanta 2000 series is all about. These devices establish the private communication channel necessary to transmit data across the Internet, and secure that channel using a variety of firewall, authentication, and encryption technologies.

The most common security vulnerabilities on IP-based networks are found in misconfigured remote systems. Remote users might fail to keep their systems and passwords updated, or disable the local firewall for better computer performance. They might leave unprotected systems connected to the network around the clock. The NetVanta 2000 series eliminates these problems.

NetVanta 2000 gateways secure your IP-based network in a number of ways. The **stateful inspection firewall** protects against cyber attacks. Advanced DES (Data Encryption Standard) or **3DES encryption** algorithms secure data as it travels across the network. Also, **Internet Key Exchange** (IKE) authenticates the user, assuring that the proper VPN tunnel is established.

How easy is it to implement NetVanta?

Simple. When adding this functionality to a remote office, you can use the existing Internet connection, or if none exists, simply contract for that service. The remote user plugs in the connectors and power. The IT manager maintains complete control over access and security settings using web-based remote configuration. The GUI also permits the import and export of pre-set configuration files for larger installations.

With NetVanta 2000, remote employees and business partners enjoy high-speed access to corporate information resources, without security risks.

NetVanta 2100

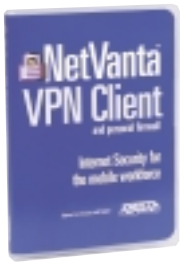
Small Office Gateway

- IPSec VPN tunneling
- Stateful inspection firewall
- Built-in router
- 10/100 BaseT Ethernet interfaces
- Web-based configuration
- Up to 10 private encrypted tunnels
- Unrestricted users

NetVanta 2050

Home Office Gateway

- IPSec VPN tunneling
- Stateful inspection firewall
- Built-in router
- 10/100 BaseT Ethernet interfaces
- Web-based configuration
- Up to 5 private encrypted tunnels
- Up to 15 users



NetVanta VPN Client

Mobile User Software Client

- IPSec VPN tunneling
- Full-featured firewall
- Supports Microsoft Operating Systems
- Security Policy Editor
- Single-user license

Forget multiple devices on each end of the circuit.

With NetVanta™, one internetworking appliance does it all.

NetVanta VPN Client is a software solution for the mobile user that runs on PCs and laptops, enabling them to establish VPN tunnels with any NetVanta VPN gateway. It includes a personal firewall that protects the user's machine whenever it is connected to the Internet, even if it is not connected to the corporate VPN.

VPN Tunneling

The NetVanta 2000 series adheres to IPSec standards and is designed to maintain data integrity, secure VPN tunneling, and protect the network from cyber attacks. Supporting both ESP and AH protocols, NetVanta 2000 gateways provide secure communication over potentially unsecured network components. Independent of the Internet service used, the NetVanta 2000 series gateways reside between the LAN and broadband modem, connecting a single workstation or an entire LAN to corporate information resources.

Firewall security and network protection

NetVanta 2000 gateways provide a comprehensive stateful inspection firewall to protect your internal network from intruders, denial of service attackers, backdoor entries, and other assaults. The firewall identifies packet sequences that are out of the norm and blocks those packets from reaching the corporate network, without bogging down performance by examining each packet in-stream.

In addition, NetVanta 2000 gateways mask the private IP address of user workstations from the public Internet using Network Address Translation (NAT). Only a single IP address is presented to the public Internet.

Data integrity and user authentication

Data being sent out onto the network is protected using the DES (Data Encryption Standard) or 3DES encryption algorithm. The integrity of data being transported across the public infrastructure is maintained using MD5 or SHA1.

In addition, every user is authenticated using Internet Key Exchange (IKE). IKE supports public/private keys or digital certificates, assuring that the proper VPN tunnel is established, and that the tunnel has not been redirected or compromised.

Improved network performance

Encryption, especially 3DES, significantly impacts CPU performance, possibly slowing all the local processes on the computer. Unlike a software-implemented VPN solution, which depends on local CPU and memory performance to implement encryption, NetVanta 2000 series standalone hardware platforms offload the CPU-intensive encryption process, so that local computer performance is unaffected.

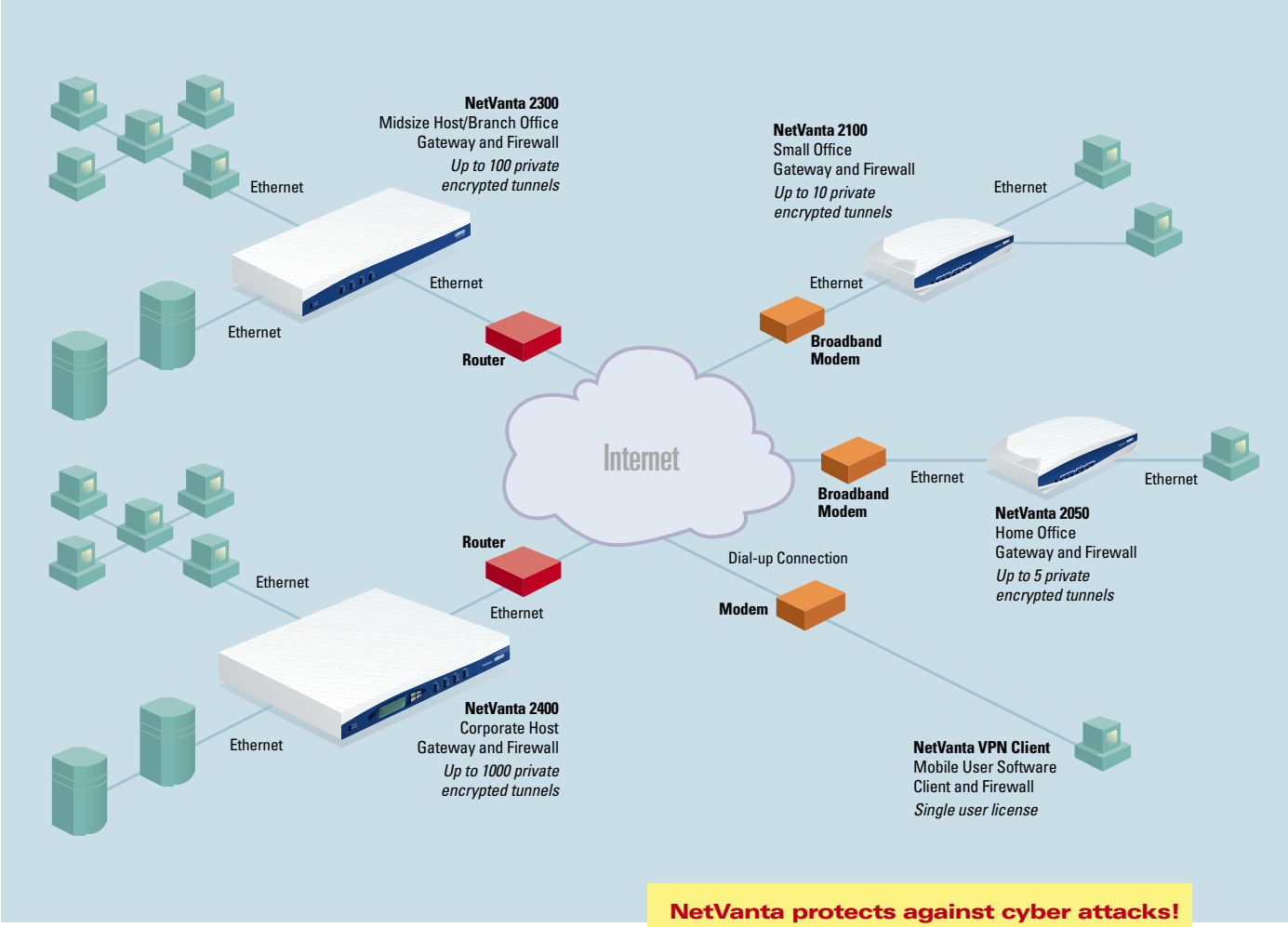
IP Routing

NetVanta 2000 gateways include an internal router for routing of IP traffic. The internal IP router supports Routing Information Protocol (RIP) versions 1 and 2, and can benefit many small enterprises and home offices. An external router may be used as well.

Web-based management

Remotely deployed NetVanta 2000 devices can be easily configured and managed using a standard web browser. Built-in alert and logging mechanisms for both messaging and mail services enable the unit to warn administrators about network activities by logging them into a SYSLOG server or sending an e-mail directly to the administrator.

Building your VPN network with the NetVanta 2000 Series.



ADTRAN's NetVanta 2000 Series provides all the necessary components required to secure an integrated VPN internet-working solution. Together, these plug-and-play devices reduce recurring wide area networking costs, improve data security, increase network performance and availability, and simplify overall net-work operations.

NetVanta protects against cyber attacks!

- LAND
- Smurf
- Winnuke
- Reassembly
  - Syndrop
  - Teardrop 2
  - Opentear
  - Tentacle
  - Ping of Death
  - Nestea
  - Big ping
  - Targa 3
  - Newtear
  - Bonk
  - Boink
  - IP fragment overlap
- IP Spoofing
- Twinge
- TCP SYN flood
- IP source route option detection
- Jolt and Jolt2
- Ascend
- TCP XMAS scan
- Octopus
- Overdrop
- Echo/chargen
- Ascend kill
- Mime flood

Meet one of the world's most successful telecom equipment suppliers.

With a 17-year history of profitability, ADTRAN™ is a company you can count on in the long run.

Committed to interoperability

ADTRAN is committed to multi-vendor interoperability based on the most up-to-date VPN features and market demand. The NetVanta 2000 series has been thoroughly tested by the VPN Consortium (VPNC), and awarded their "stamp of approval" for conformance tests. Visit the VPNC website at *www.vpnc.org* for more information.

ADTRAN also conducts rigorous, in-house inter-operability tests between the NetVanta 2000 series and other VPN vendor products based on IPSec and IKE. For a list of supported third-party products, visit *www.adtran.com/netvanta2000*. If you have questions regarding NetVanta 2000 series interoperability, contact an ADTRAN network engineer at **800 615-1176**.

VPNC CERTIFIED

Market leadership

ADTRAN is a market leader; a partner you can count on for ongoing product support and long-range product development efforts. Today, ADTRAN holds number one market share positions in many key digital internetworking technologies, including enterprise-class integrated access devices and carrier-class HDSL equipment. The company has also maintained a leadership position for several consecutive years in T1 and subrate CSU/DSUs, Frame Relay/DDS extension, and ISDN extension.

Service after the sale

Every NetVanta™ 2000 series product comes with an industry-leading five-year warranty and best-in-class service and support. If something goes wrong, a single toll-free call puts you in touch with a knowledgeable expert in ADTRAN's technical support organization—an organization that is highly rated by customers as responsive and effective in troubleshooting and problem resolution. Support is available 24x7 toll-free.

In addition, ADTRAN Custom Extended Services (ACES) offers more advanced installation and maintenance options, ranging from next business day to four-hour response.

Complete installation and maintenance training

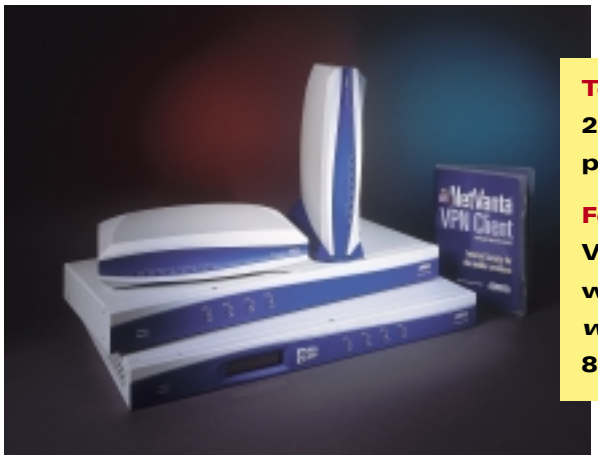
As an ADTRAN customer, you'll enjoy access to a comprehensive training program that includes free and fee-based options. By taking advantage of the expertise ADTRAN has to share, you'll find yourself properly trained to handle most installation and operational tasks. Sessions are available on-site, off-site, and on the Internet.

Product reliability

Your NetVanta purchase is backed by an indisputable reputation for quality and reliability—the result of ADTRAN's long-term, corporate-wide commitment to quality assurance in all phases of business and manufacturing operations. From initial product design and development to the post-production testing of every single unit shipped, ADTRAN means quality. An ISO 9001 and TL 9000 certified supplier, the company maintains extensive in-house labs for reliability testing, component failure analysis, and compliance testing—all in the name of customer satisfaction.

NetVanta 2000 Series Quick Reference Guide

	NetVanta VPN Client	NetVanta 2050	NetVanta 2100	NetVanta 2300	NetVanta 2400
Part Number	1200360L1	1200362L1	1200361L2	1200366L1	1200367L1
Hardware Form Factor	Software	Standalone	Standalone	1U	1U
Maximum Throughput (3DES)	N/A	2 Mbps	8 Mbps	8 Mbps	45 Mbps
Tunnel Capacity (Site-to-Site)	1	5	10	100	1000
User Capacity	1	15	Unrestricted	Unrestricted	Unrestricted
Hardware Encryption Acceleration			•	•	•
Ethernet Interfaces	N/A	(2) WAN, LAN	(2) WAN, LAN	(3) WAN, LAN, DMZ	(3) WAN, LAN, DMZ
VPN					
IPSec Tunneling Protocol	•	•	•	•	•
DES/3DES Encryption	•	•	•	•	•
MD5/SHA1 Authentication	•	•	•	•	•
PKI X.509 V3 Certificate Support	•	•	•	•	•
Firewall					
Packet Filter	•				
Stateful Packet Inspection		•	•	•	•
Management					
Web-based Management		•	•	•	•
Secure Remote Management	•	•	•	•	•
Monitoring/Reporting					
SYSLOG		•	•	•	•
Logging	•	•	•	•	•
Event Notification	•	•	•	•	•
Routing					
Static	N/A	•	•	•	•
RIP (V1&V2)	N/A	•	•	•	•
Other					
Network Address Translation (NAT)	N/A	•	•	•	•
Port Forwarding	N/A	•	•	•	•
DHCP Server	N/A	•	•	•	•
DHCP Client, PPPoE Client	N/A	•	•	•	•
Interoperability					
VPNC Conformance Certification		•	•	•	•



To place an order for an ADTRAN NetVanta 2000 series VPN/Internet Security solution, please contact your reseller.

For more information about ADTRAN's VPN/Internet security solutions, or other wide area connectivity solutions, visit *www.adtran.com/netvanta2000*, or call 800 615-1176.

ADTRAN, Inc.
Attn: Enterprise Networks
901 Explorer Boulevard
Huntsville, AL 35806

P.O. Box 140000
Huntsville, AL 35814-4000

256 963-8000 voice
256 963-8699 fax
256 963-8200 fax back

General Information
800 9ADTRAN
info@adtran.com
www.adtran.com

Pre-Sales Technical Support
800 615-1176
application.engineer@adtran.com
www.adtran.com/support

Where To Buy
877 280-8416
channel.sales@adtran.com
www.adtran.com/where2buy

Post-Sales Technical Support
888 423-8726 (888-4ADTRAN)
support@adtran.com
www.adtran.com/support

ACES Installation & Maintenance Services
888 874-ACES
aces@adtran.com
www.adtran.com/support

Training
800 615-1176 voice
256 963-6700 fax
training@adtran.com
www.adtran.com/university

International Inquiries
256 963-8000 voice
256 963-6300 fax
international@adtran.com
www.adtran.com/international

For the regional office nearest you, visit *www.adtran.com/regional*

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