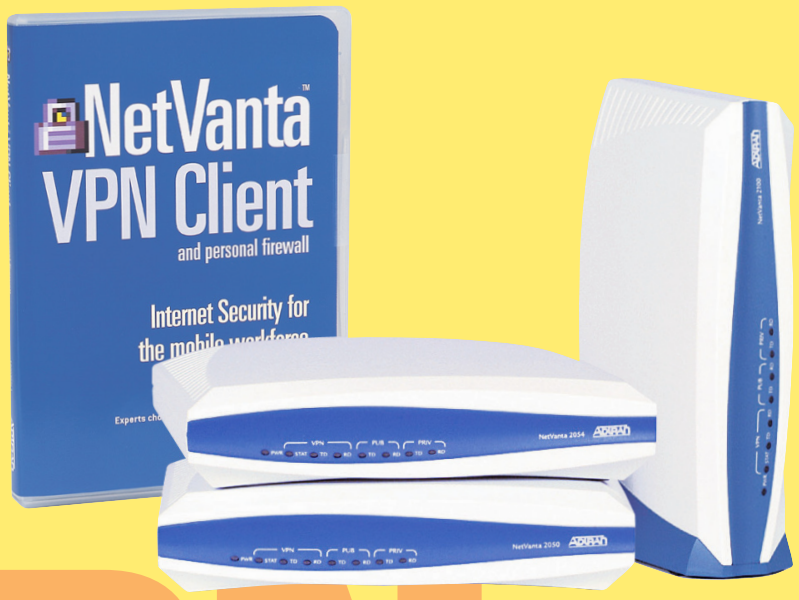
LAN-to-WAN Solutions



VPN

The NetVanta® 2000 Series

www.adtran.com/vpn

ADTRAN®

Low-cost access to corporate information resources, without security risks.

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 IP router supports BGP, OSPF, GRE, and RIP
- DES, 3DES, and AES encryption secures data
- Internet Key Exchange (IKE) authenticates users
- Quality of Service (QoS) for delay-sensitive applications such as VoIP
- Feature-rich ADTRAN Operating System (AOS)
- Network Address Translation (NAT) conceals private IP addresses
- Remote Web GUI and CLI configuration simplify network control
- Reliable pre- and post-sales support extends product value
- Industry-leading 5-year warranty

ADTRAN 5 Year Warranty

Why NetVanta 2000?

The NetVanta 2000 Series is a family of VPN/firewall appliances designed for high-speed, cost-effective connectivity of remote offices, telecommuters, and mobile users over the Internet or other IP-based networks, without the security concerns normally associated with shared networks. There are at least four compelling reasons to implement a NetVanta 2000 solution as part of your network plan.

1. **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.

2. **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.

3. **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.

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 Internet security solution?

The NetVanta 2000 Series from ADTRAN.

VoIP Ready

Introducing the NetVanta 2000 Series.

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.

NetVanta 2100

Small Office Gateway

- IPSec VPN tunneling
- DES/3DES/AES encryption
- Stateful inspection firewall
- One public and one private 10/100Base-T Ethernet interface
- Built-in IP router
- Web GUI or CLI remote configuration
- Up to ten private encrypted tunnels
- Unrestricted users

NetVanta 2054

Home Office Gateway

- IPSec VPN tunneling
- DES/3DES/AES encryption
- Stateful inspection firewall
- Built-in four-port Ethernet switch
- One public and four private 10/100Base-T Ethernet interface
- Built-in IP router
- Web GUI or CLI remote configuration
- Up to five private encrypted tunnels
- Up to 15 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 channels necessary to transmit data across the Internet, and secure these channels 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 could disable the local firewall for better computer performance. They might leave unprotected systems connected to the network around the clock. The NetVanta 2000 Series protects your network from these vulnerabilities.

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

How easy is it to implement a NetVanta 2000 VPN Solution?

Simple. When adding this functionality to a remote office, simply use an Internet connection. The IT manager maintains complete control over access and security settings using either a Web-based GUI or a Familiar Command Line Interface (CLI). In addition, the Web GUI simplifies configuration with the use of graphical wizards that walk you through the configuration process, one step at a time. Based on the ADTRAN Operating System (AOS), configuration files can be saved and downloaded to expedite reconfiguration, or as a backup. To administer user accounts, the NetVanta 2000 Series employs XAUTH using RADIUS and RSA SecurID.

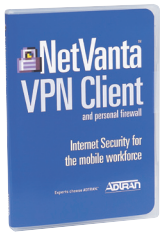
RSA SECURED

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

NetVanta 2050

Home Office Gateway

- IPSec VPN tunneling
- DES/3DES/AES encryption
- Stateful inspection firewall
- One public and one private 10/100Base-T Ethernet interface
- Built-in IP router
- Web GUI or CLI remote configuration
- Up to five 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

Versatile, feature-rich security appliances for remote corporate access.

The NetVanta® 2000 Series offers secure connectivity throughout your network.

ADTRAN conducts rigorous, in-house interoperability tests between the NetVanta 2000 Series and third-party VPN products based on IPSec and IKE standards. For a list of supported third-party products, visit *ww.adtran.com/vpn*. If you have questions regarding NetVanta 2000 Series interoperability, contact an ADTRAN network engineer at **800 615-1176**.

Firewall security and network protection

NetVanta 2000 gateways provide a comprehensive stateful inspection firewall to protect your internal network from intruders, Denial of Service (DoS) 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.

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.

Data integrity and user authentication

Data being sent out onto the network is protected using DES, 3DES, or AES encryption algorithms. 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 the local processes on a 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 BGP, OSPF, and RIP, and can benefit many enterprises and home offices.

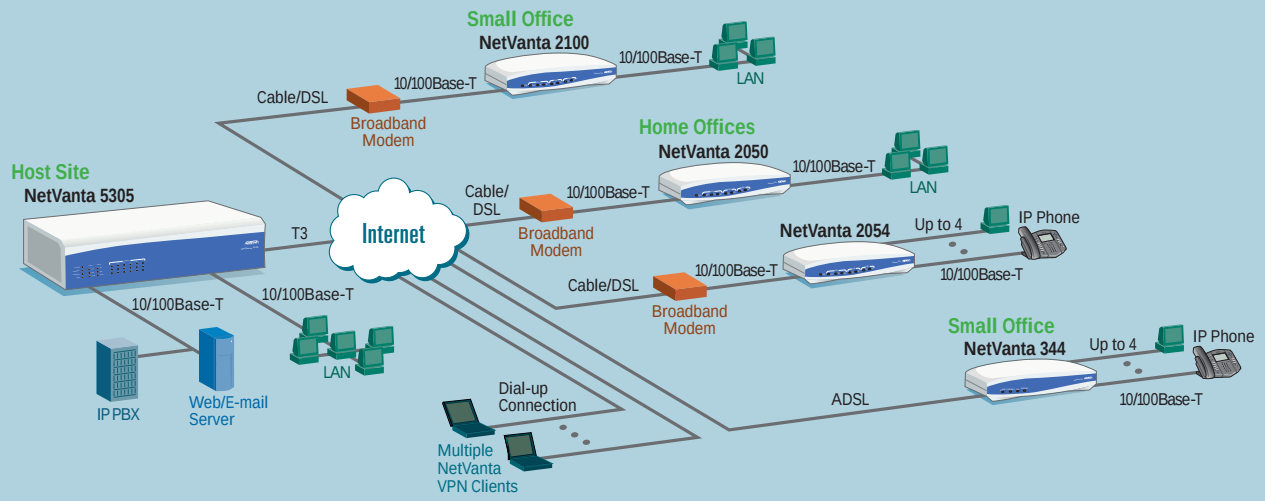
Quality of Service (QoS) for VoIP

QoS is also supported for delay sensitive traffic like VoIP or video. To prioritize mission critical traffic and control network congestion, the NetVanta 2000 Series uses Low Latency Queuing, Weighted Fair Queuing (WFQ), Class-based WFQ, and DiffServ marking to establish priority of IP packets routed over the WAN. In combination with the QoS features, a specialized SIP Application Layer Gateway (ALG) allows SIP traffic to traverse NAT-enabled firewalls. For an enterprise network, this interoperability allows IP PBXs, phones, and other SIP-based devices to set up, tear down, and pass voice and call control messages seamlessly through the integral NAT-enabled firewall.

Robust management

Remotely deployed NetVanta 2000 devices can be easily configured and managed using either a standard web browser or a familiar Command Line Interface (CLI). All devices are also supported by n-Command™, ADTRAN's enterprise NMS, that is ideal for managing larger NetVanta deployments and features a robust configuration management suite to effectively manage a

VPN Connectivity Using the NetVanta 2000 Series



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

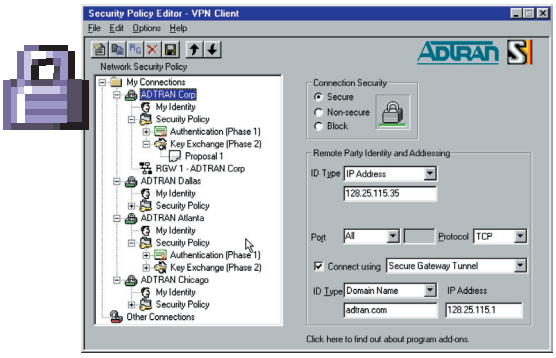
distributed network. Built-in alert and logging mechanisms for both messaging and mail services enable the unit to warn administrators about network activities by logging them into a SYSLOG server or sending an e-mail directly to the administrator.

The flexibility of the ADTRAN Operating System (AOS)

NetVanta 2000 Series security appliances are built on the versatility of the AOS, offering a wealth of features and functionality. The AOS makes it possible to implement the right set of features for your particular application, within the NetVanta 2000 Series and across other ADTRAN NetVanta Series platforms. As new functionality becomes available in the AOS, it can be easily adopted within NetVanta product lines. To lower total cost of ownership, ADTRAN offers free, downloadable firmware updates of the current AOS to NetVanta 2000 owners.

Network integration

Using the NetVanta 2000 Series in conjunction with ADTRAN's NetVanta routers and switches offers the highest possible level of integration across the enterprise network. These product lines share the AOS, ensuring common configuration practices, VPN policies, protection schemes, and management interfaces regardless of the class of NetVanta equipment installed.



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.

ADTRAN: One of the world's most successful network access equipment suppliers.

ADTRAN® is a company you can depend on for high-value, customer-centric solutions.

NetVanta® 1000 Series
Integrated Switch-Router Platforms
Managed Fast Ethernet/PoE/
Gigabit Switches

NetVanta 2000 Series
VPN/Internet Security Appliances

NetVanta 3000/4000/5000 Series
IP Access Routers

NetVanta 7100
IP Telephony

NetVanta 300 Series
ADSL/ADSL2/ADSL2+ Routers

ATLAS Series
Integrated Access Devices

TRACER Series
License-Free Wireless Devices

Value-oriented solutions for the cost-conscious IT manager

ADTRAN addresses today's value-oriented networking market with a full line of enterprise solutions for LAN-to-WAN connectivity over IP, TDM, switched, and wireless architectures. Our mission with these solutions is to lower acquisition costs, lower recurring monthly costs, or both, lowering Total Cost of Ownership (TCO) and offering you the best possible value in network access.

The reliability of a market leader

Our LAN-to-WAN solutions complement our highly successful and long-standing lines of wide area connectivity and carrier-class network access products. Our newest products reflect the same exacting attention to detail that won us market leadership positions in key technologies such as integrated access devices (IADs), T1/HDSL2/4 transport, T1and subrate CSU/DSUs, Frame Relay/DDS extension, and ISDN extension.

Relentless product refinement and cost reduction

A strategy of relentless product refinement and cost reduction remains one of the primary drivers behind our market successes. Cost reduction at ADTRAN is about smart engineering, not cutting corners. We reward engineers who reduce costs in the same way we reward engineers who innovate. We also lower costs by using ADTRAN-developedintellectual property where feasible.

Quality and reliability in every unit

Your ADTRAN purchase is backed by an indisputable reputation of 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 post-production testing of every unit shipped, ADTRAN means quality. A TL 9000 3.0, ISO 9001:2000, and ISO 14001 certified supplier supporting next-generation quality standards, the company maintains extensive in-house labs for reliability, component, and compliance testing—all in the name of customer satisfaction.

High-touch customer support

Every ADTRAN solution is backed by a 100% satisfaction guarantee, including an industry-leading, five-year warranty and best-in-class service and support.

- **Unlimited toll-free telephone technical support**—A single toll-free call puts you in touch with a knowledgeable expert in our technical support organization.
- **ADTRAN Custom Extended Services (ACES)**—A customizable installation and maintenance services program guaranteeing priority access to a technical support engineer, with 30-minute call back and on-site product replacement in as few as four hours, depending on the service plan selected.
- **Comprehensive training and certification solution**—Access to a comprehensive training and certification program that includes both free and fee-based options. Sessions are available on-site, off-site, on CD, and on the Internet.

ASP ADTRAN Sales Professional
ATSA ADTRAN Technical Support Associate
ATSP ADTRAN Technical Support Professional

Technical Questions 800 615-1176 *www.adtran.com/support*
Where To Buy 877 280-8416 *www.adtran.com/where2buy*

NetVanta 2000 Series Feature Matrix

Internet Security Appliances	NetVanta VPN Client	NetVanta 2050	NetVanta 2054	NetVanta 2100
Part Number	1200360L1	1202362L2	1202363L2	1202361L2
Product Features				
Form factor-	Software	Desktop	Desktop	Desktop
Maximum VPN Throughput		2 Mbps	2 Mbps	10 Mbps
Tunnel Capacity (Site-to-Site)	1	5	5	10
Users Supported	1	15	15	Unrestricted
Hardware Encryption Acceleration				•
Public Ethernet Interfaces		1	1	1
Private Ethernet Interfaces		1	4-Port Switch	1
VPN				
IPSec Tunneling Protocol	•	•	•	•
DES/3DES/AES Encryption	•	•	•	•
MD5/SHA1 Authentication	•	•	•	•
XAUTH: RADIUS & RSA SecurID		•	•	•
PKI X.509 v3 Certificate Support	•	•	•	•
Firewall				
Packet Filter	•			
Stateful Packet Inspection		•	•	•
NAT (1:1), NAPT (Many:1), 1:1 Port Translation		•	•	•
Access Control Lists		•	•	•
Denial of Service (DoS) Protection		•	•	•
Application Level Gateways (ALGs)		•	•	•
Port Forwarding		•	•	•
Management				
Web-Based Graphical Interface (HTTP)		•	•	•
Command Line Interface (CLI)		•	•	•
Secure Remote Management		•	•	•
n-Command™ NMS		•	•	•
Monitoring/Reporting				
Logging	•	•	•	•
Syslog		•	•	•
Event Notification	•	•	•	•
Protocols				
IP Routing		•	•	•
eBGP/iBGP, OSPF, RIP, Static		•	•	•
GRE		•	•	•
DHCP				
DHCP Server, Client, Relay		•	•	•
Interoperability				
VPNC Conformance Certification		•	•	•
RSA Secured		•	•	•
Quality of Service (QoS)				
Class-based Weighted Fair Queuing		•	•	•
Low Latency Queuing		•	•	•
Weighted Fair Queuing		•	•	•
DiffServ Marking/Recognition		•	•	•
Warranty				
Five-Year		•	•	•

To place an order for an ADTRAN solution, please contact your technology supplier.

ADTRAN is an ISO 9001, ISO 14001, and a TL 9000 certified supplier.