

## **NetVanta Ethernet Switches**

**Smart IP Business Solutions** 



## Flexible, innovative switching solutions.

ADTRAN provides a full line of powerful switching solutions for all your network needs. With ADTRAN's award-winning and innovative NetVanta Ethernet switches, routers, Virtual Private Networking (VPN), wireless, and IP telephony products, it is easy to find a quality solution to meet your specific requirements for IP business communications.

Our portfolio of business-class switching solutions is perfect for Small- and Mediumsized Businesses (SMBs) or multi-site enterprise networks. These solutions address today's highest networking priorities, from bandwidth expansion to network security.

You can select from a full range of products, including multiservice and fixed-port routers with Ethernet switching, as well as, Fast Ethernet, Power over Ethernet (PoE), and Gigabit Ethernet switches.

#### **■** Bandwidth Expansion

ADTRAN offers a breadth of products from Fast, Layer 2 and Layer 3, and Gigabit Ethernet switches to integrated switch-router platforms with security and wireless access. Switching products range in port count from four to 48 ports and include Fast, Gigabit, and fiber platforms, accomodating your network's most bandwidth-intensive applications.

#### **■ VoIP Migration**

NetVanta switching solutions make it easy to transition your network to accommodate Voice over IP (VoIP) applications. ADTRAN's Ethernet switching solutions are VoIP-ready with 802.af

and Legacy PoE, Quality of Service (QoS), and Class of Service (CoS). Robust multiservice routers with on-board switching also provide a unique, cost-effective Wide Area Network/Local Area Network (WAN/LAN) solution for all-in-one SMB networking.

#### **■** Wireless LAN

A comprehensive wireless networking solution is available for organizations that need business-class features, security and reliability at an affordable price. The NetVanta Series features a standards-based Wireless LAN (WLAN) solution as part of an industry-unique, all-in-one access platform with centralized control architecture for easy deployment and management. Wireless Access Points (WAPs) from ADTRAN are PoE capable; have the ability to segment wireless networks through the use of Virtual Access Points (VAPs); and can disable SSID broadcasts. The enhanced security features combined with ease of use and ease of management make WLAN perfect for businesses of all sizes.

#### Network Security

The NetVanta Series of Ethernet Switches provides a stringent line of defense against

common security threats. The security portfolio features Network Access Control (NAC), support for 802.1Q trunking for VLANs to allow network managers to segregate traffic, and enhance networking performance. NetVanta Switches include MAC-based port security, multilevel user passwords, Secure Shell (SSH) and Secure Socket Layer (SSL) for encrypted user login, and Access Authentication and Authorization (AAA) for authentication with a RADIUS, RSA SecurID and TACACS+.

#### **■** Power Conservation

The telecommunications industry is embracing the move to "green" technology with the establishment of new standards that will revolutionize the industry. As networks continue the transition to all-IP architectures, and the demand for bandwidth continues to increase, the need for energy-efficient power consumption and "green" technologies will hold an even greater role. NetVanta Switches offer several ways to conserve on power. They efficiently deploy only the needed power to a device and also offer the ability to schedule a port to be activated and deactivated based on time-of-day. This conserves on power usage and utility costs.

# Powerful switching solutions for all your networking needs.

## Fast Ethernet and Gigabit Ethernet Switches

The NetVanta 1200 and 1500 Series include full-featured, managed, Layer 2 and Layer 3, Fast Ethernet, Gigabit Ethernet, PoE, and fiber switches. The NetVanta 1234 and NetVanta 1238 offer 24-48 ports Fast Ethernet each with Gigabit uplink ports for stacking and optional PoE. The NetVanta 1534 Gigabit Ethernet Switch provides affordable, higher capacity switching for Gigabit-to-the-desktop applications and even PoE. For multi-floor, and campus aggregation switching needs, the NetVanta 1544, 1544P, and 1544F offer multi-layer, wire-speed switching capacity. Business-class features, flexible management, and a favorable price point set these switches apart from all other switches in their category.

#### **Wireless Access Points**

Wi-Fi your NetVanta network with the NetVanta 150 Wireless Access Point (WAP) or the NetVanta 1335 with Wi-Fi. Both solutions provide 802.11a/b/g radio support at speeds up to 54 Mbps and advanced security features like 802.1x authentication, WPA/WPA2, and the disabling of SSID broadcasts. Through the use of VAPs, these wireless products have the ability to segment a wireless network securely.

Together, these business-class wireless products are perfect for the corporate



environment in need of a secure, integrated WLAN solution.

#### **IP Phones**

ADTRAN also offers a full line of IP phones to complete your network switching solution, making VoIP easy and affordable. This series offers a full suite of SIP-compliant phones including ADTRAN-designed IP phones and ADTRAN-Polycom phones. These products offer outstanding quality and affordability for use in today's VoIP-enabled networks. For more information on these or other ADTRAN networking solutions, visit us online at www.adtran.com.





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## VoIP made easy.

The NetVanta 1200 Series is part of a family of full-featured, managed, Layer 2 Ethernet, and Power over Ethernet (PoE) switches. There are many compelling reasons to implement a NetVanta switching solution as part of your networking plan.

#### VolP-ready

The NetVanta 1200 Series includes full-featured, managed, Layer 2 Fast Ethernet switches. The NetVanta 1234 offers 24-ports Fast Ethernet and the NetVanta 1238 features 48-ports. Each switch comes with Gigabit uplink ports and optional PoE. Designed for fast, secure Local Area Network (LAN) switching, the NetVanta 1200 Series uses robust Quality of Service (QoS) features, and Link Layer Discovery Protocol-Media Endpoint Discovery (LLDP-MED) making NetVanta switches ideal for use with VoIP applications. The business-class features, flexible management, and a favorable price point set these switches apart from all others in their category.

#### **Intelligent Switching**

The NetVanta Series of switches offers advanced switching features — starting with intelligent power management. The power conservation feature has the ability to power down devices when not in use. In addition to providing energy efficiency, this feature also turns off IP phones and Wireless Access Points (WAPs) after business hours to minimize security risks. To aid in troubleshooting, an intelligent cable diagnostics feature identifies cable length and detects shorts or opens in Ethernet cables.

#### **Affordability for SMBs**

NetVanta switching solutions offer a low initial investment, coupled with simplified installation, configuration and management without sacrificing functionality or reliability. NetVanta switching solutions significantly lower Total Cost of Ownership (TCO) and improve Return on Investment (ROI). These full-featured solutions are priced free of hidden charges, such as mandatory maintenance agreements and costly firmware downloads. In addition, they are backed by an industry-leading warranty and unlimited technical support.



#### NetVanta 1238

- 48-port, managed, Layer 2 Fast Ethernet switch
- 4 Gigabit ports for uplinks or stacking
- 2 SFP module slots for optical connections
- Non-blocking switching capacity up to 17.6 Gbps
- 1U-high rackmountable metal enclosure

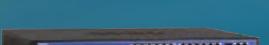


#### NetVanta 1238 PoE

- 48-port, managed, Layer 2 Fast Ethernet switch
- 4 Gigabit ports for uplinks or stacking
- 2 SFP module slots for optical connections
- Non-blocking switching capacity up to 17.6 Gbps
- 802.3af and Legacy PoE
- 1U-high rackmountable metal enclosure

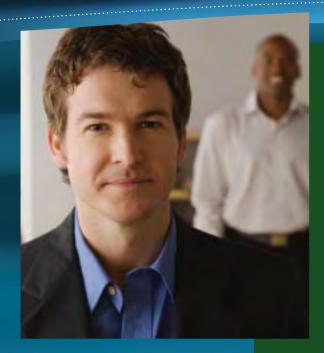
ADTRAN's NetVanta family of voice and data networking solutions is designed specifically to meet the needs of the value-driven SMB by providing a reliable, easy-to-use, business-class product at an SMB-friendly price point.





#### NetVanta 1234

- 24-port, managed, Layer 2 Fast Ethernet switch
- 4 Gigabit ports for uplinks or stacking
- 2 SFP module slots for optical connections
- Non-blocking switching capacity up to 12.8 Gbps
- 1U-high rackmountable metal enclosure



#### \*\*\*\*\*

#### NetVanta 1234 PoE

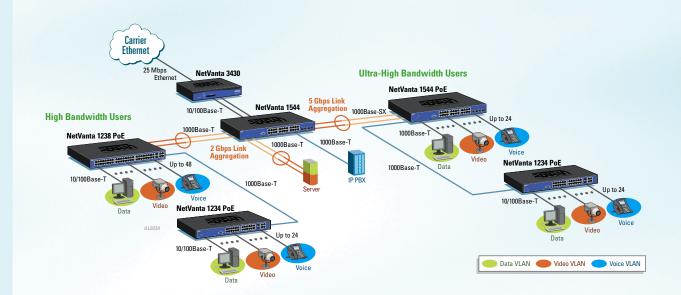
- 24-port, managed, Layer 2 Fast Ethernet switch
- 4 Gigabit ports for uplinks or stacking
- 2 SFP module slots for optical connections
- Non-blocking switching capacity up to 12.8 Gbps
- 802.3af and Legacy PoE
- 1U-high rackmountable metal enclosure

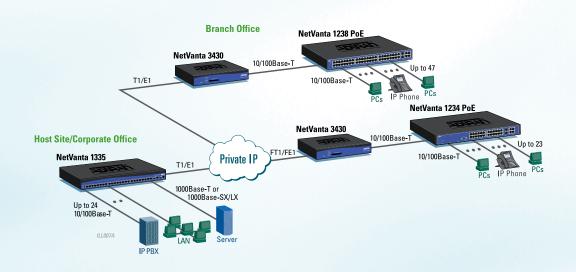
#### **NetVanta Switches At-A-Glance**

- Full-featured, managed, Layer 2 , Fast Ethernet, and Power over Ethernet switches
- Interoperable in established, multi-vendor networks
- Up to 17.6 Gbps switching capacity, non-blocking
- Gigabit SFP/1000Base-T uplink capability
- Link Aggregation
- MAC-based port security
- 802.10 tagged and port-based VLANs
- LLDP/LLDP-MED for easy IP phone configuration
- Wi-Fi Access Controller for centralized management of NetVanta WAPs
- Cable diagnostics detects shorts or opens in Ethernet cables
- Port Scheduler to schedule PoE deployment
- Feature-rich ADTRAN Operating System (AOS)
- Easily recognizable Command Line Interface (CLI)
- Intuitive Web-based Graphical User Interface (GUI)
- Free firmware updates

# VLAN Switching and Inter-VLAN Routing

NetVanta switches provide managed switching features, like 802.1Q Virtual LANs (VLANs) and VLAN trunking. VLANs provide logical segmentation of the network adding security and the separation of broadcast domains, which improves overall network performance. NetVanta switches can use the Gigabit Ethernet ports for uplink capability using 1000Base-T or optical connections using the Small Form factor Pluggable (SFP) modules for single-or multimode fiber applications. In addition, these Gigabit ports can be used for VLAN trunking to an upstream switch, link redundancy or to connect high-speed ports on servers or other devices.





# Power over Ethernet (PoE) and Quality of Service (QoS) for VoIP Networks

NetVanta Ethernet switches and multiservice routers provide PoE and QoS functionality for Voice over IP (VoIP) networks. QoS ensures network managers have the ability to prioritize delay-sensitive or mission-critical traffic and control network congestion. NetVanta 1200 Series Switches support Layer 2 802.1p Class of Service (CoS), while Weighted Round Robin and Strict Priority Queuing are used for traffic prioritization. At Layer 3, NetVanta Multiservice Routers support bandwidth shaping, DiffServ marking and Class-based Weighted Fair or Low Latency Queuing.

# Converged services to the desktop at Gigabit speeds.

The NetVanta 1500 Series is part of a family of full-featured, managed, multi-layer, Gigabit, Power over Ethernet, and Fiber Ethernet switches. This series of switches provides the ideal solution for use in campus applications, Gigabit-to-the-desktop, or as an aggregator switch.

#### Bandwidth Intensive Applications

The NetVanta 1500 Series of Gigabit Ethernet switches provides higher bandwidth to corporate and branch office LANs in support of today's most bandwidth intensive applications. These switches are perfect for new installations or network upgrades. The NetVanta 1544 is a managed, 28-port, Layer 3, GigE switch designed as an access layer or network backbone switch for small to medium enterprises. It is ideal as an aggregation switch for high-bandwidth VoIP, Gigabit-to-the-Desktop deployments, and

converged voice and data networks. NetVanta 1544P offers 802.3af and legacy PoE, while the NetVanta 1544F switch features 28 SFP fiber ports.

#### **Aggregation Switching**

With the introduction of the NetVanta 1544 products, ADTRAN offers an all-ADTRAN solution for the small-to-medium enterprise network. The Layer 3 switching capability of these products offers automatic, wire-speed routing between VLANs allowing for fast transmission of IP traffic between fast Ethernet, access layer switches.

#### **Extending the Reach of the LAN**

Fiber Optics extends the reach beyond the 100-meters limitation often associated with copper switchport interfaces. The NetVanta 1544F is an all-Fiber solution, extending the reach and offering redundancy, with virtual router redundancy protocol (VRRP) between buildings in campus environments or between wiring closets. Four of the SFP ports support up to 2.5 Gbps per interface allowing for faster throughput and link aggregation up to 10 Gbps between NetVanta 1544 switches.



#### NetVanta 1544

- 28-port, managed, Layer 3 Gigabit Ethernet switch
- 24 1 Gbps copper and 4 2.5 Gbps SFP module slots for optical connections
- Non-blocking switching capacity up to 68 Gbps
- 1U-high rackmountable metal enclosure



#### NetVanta 1544P

- 28-port, managed, Layer 3 Gigabit Ethernet switch
- 24 1 Gbps copper and 4 2.5 Gbps SFP module slots for optical connections
- Non-blocking switching capacity up to 68 Gbps
- 802.3af and Legacy PoE
- 1U-high rackmountable metal enclosure



#### NetVanta 1544F

- 28-port, managed, Layer 2/Layer3 Fiber Optics Gigabit Ethernet switch
- 24 1 Gbps optical SFP module slots and 4 2.5 Gbps optical SFP module slots
- Non-blocking switching capacity up to 68 Gbps
- 1U-high rackmountable metal enclosure

ADTRAN's NetVanta 1534 managed Gigabit switch offers Power-over-Ethernet and 'green' technology to reduce costs.



ADTRAN NetVanta 1534 Named "Best Data Networking Product of the Year" by Channel Insider.



#### **NetVanta GigE Solutions**

- Full-featured, managed Layer 2 and Layer 3, Fast Ethernet, Power over Ethernet, and Gigabit Ethernet switches
- Interoperable in established, multi-vendor networks
- Up to 68 Gbps switching capacity, non-blocking
- Gigabit SFP/1000Base-T uplink capability
- Link Aggregation
- MAC-based port security
- 802.10 tagged and port-based VLANs
- LLDP/LLDP-MED for easy IP phone configuration
- Wi-Fi Access Controller for centralized management of NetVanta WAPs
- Cable diagnostics detect shorts or opens Ethernet cables
- Port Scheduler to schedule PoE deployment
- Feature-rich ADTRAN Operating System (AOS)
- Easily recognizable Command Line Interface (CLI)
- Intuitive Web-based Graphical User Interface (GUI)
- Free firmware updates
- CompactFlash slot for configuration files, auto provisioning, and new firmware.

#### NetVanta 1534

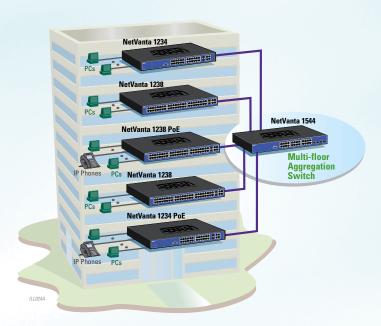
- 26-port, managed, Layer 2 Gigabit Ethernet switch
- 24 1 Gbps copper and 2 1 Gbps SFP module slots for optical connections
- Non-blocking switching capacity up to 52 Gbps
- 1U-high rackmountable metal enclosure

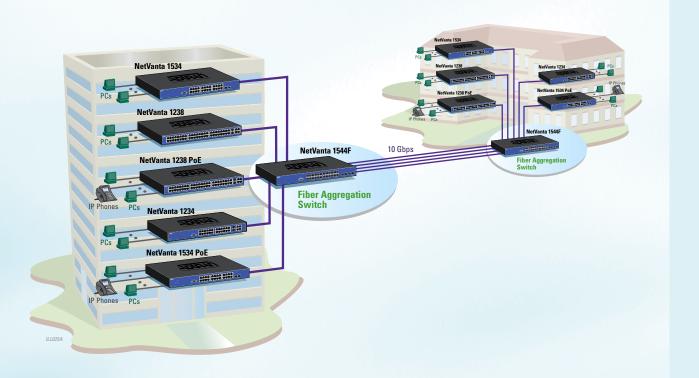
#### NetVanta 1534 PoE

- 26-port, managed, Layer 2 Gigabit Ethernet switch
- 24 1 Gbps copper and 2 1 Gbps SFP module slots for optical connections
- Non-blocking switching capacity up to 52 Gbps
- 802.3af and Legacy PoE
- 1U-high rackmountable metal enclosure

### **Multi-floor Aggregation Switching**

In this multi-floor configuration the ability to aggregate connections along with wire-speed switching for network traffic provides additional bandwidth for connectivity with the NetVanta 1544 aggregation switch. Uplink ports on NetVanta 1200 Series Switches provide a high-bandwidth connection to the NetVanta 1544. NetVanta switches support both copper-based 1000Base-T and fiber-based optical connections using the Small Form-factor Pluggable (SFP) modules supporting both single and multimode fiber applications. In addition, these Gigabit ports can be used for VLAN trunking to the NetVanta 1544 aggregation switch, for link redundancy, or for high-speed connections to servers or other devices.





### Fiber Optics Aggregation Switching

With the reach of Fiber Optics, distances beyond 100M are now supported for switch aggregation. This allows for direct connectivity between floors to a central switch as well as providing connectivity between buildings for campus network aggregation. The NetVanta 1544F offers flexible connectivity options supporting 10 Mbps to 1 Gbps of bandwidth on the 24 Copper/SFP slots. Four 2.5 Gbps SFP uplink ports may be used for link aggregation (up to 10 Gbps) between NetVanta 1544 units. This solution offers wire-speed switching performance with these flexible connectivity options.

# Multiple networking functions—a single box solution.

The NetVanta Series of Multiservice Routers provides affordable, all-in-one connectivity by offering a variety of networking functions wrapped into a single, compact device. These integrated, versatile platforms are capable of solving a multitude of switching challenges. These products are perfect for bandwidth-intensive applications like Voice over IP (VoIP) or for reliable, corporate Local Area Network/Wide Area Network (LAN/WAN) connectivity and Internet access.

#### **The Power of Integration**

With the integration of multiple networking functions, NetVanta all-in-one routing platforms perform services such as switching, IP routing, firewall, Virtual Private Networking (VPN), and even 802.11a/b/g Wi-Fi in a single platform. These platforms are modular in nature and can accommodate a wealth of WAN interfaces depending on your connection needs. These integrated solutions simplify installation, configuration and troubleshooting, reducing the number of devices to be managed, all while eliminating excess cabling costs.

## The Speed of Layer 3 and the Freedom of Wi-Fi

The NetVanta 1335 integrates a modular IP access router, 24-port PoE Layer 3 switch, firewall, VPN appliance, and even 802.11a/b/g wireless access all-in-one compact platform. This Wi-Fi Certified radio supports rates up to 54 Mbps and offers a full suite of business-class security needs like WPA/WPA2, 802.1x user authentication, and Virtual Access Points (VAPs), the equivalent of wireless, Virtual LANs (VLANs).

#### **Performance and Flexibility**

The NetVanta 3448 is the perfect high-performance, versatile solution for smaller network switching needs. The NetVanta 3448 features a fully managed, non-blocking, eight-port PoE switch. It can power any 802.3af compliant PoE device, including IP Phones, Wireless Access Points (WAPs), or security cameras. Compact and economical, it delivers high-performance throughput with ADTRAN's *RapidRoute* technology for bandwidth-intensive applications.

#### NetVanta 1335

- Multiservice router with integral 24-port, Layer 3
   Ethernet switch
- Dual Gigabit/SFP module slots for uplink or stacking
- CompactFlash slot for configuration files, auto provisioning, and firmware
- Cable diagnostics to identify an open or short per twisted pair
- VQM for MOS, jitter, delay and packet loss statistics

#### NetVanta 1335 PoE

Multiservice router with integral 24-port, Layer 3
 Ethernet switch

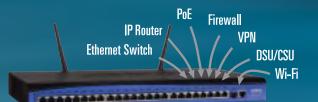
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- 802.3af PoE switch delivering 15.4 watts per port
- Dual Gigabit/SFP module slots for uplink or stacking
- CompactFlash slot for configuration files, auto provisioning, and firmware
- Cable diagnostics to identify an open or short per twisted pair
- VQM for MOS, jitter, delay and packet loss statistics

#### NetVanta 1335 Wi-Fi

- Multiservice router with integral 24-port, Layer 3
   Ethernet switch
- 802.11a/b/g dual radio Wireless Access Point (WAP)
- Single Gigabit/SFP module slot for uplink or stacking
- CompactFlash slot for configuration files, auto provisioning, and firmware
- Cable diagnostics to identify an open or short per twisted pair
- VQM for MOS, jitter, delay and packet loss statistics

Significantly reduce your Total Cost of Ownership (TCO) with a single platform that accomplishes multiple networking functions. Multiservice access routers are affordable routing, switching, firewall, VPN, and Wi-Fi solutions for business-class networking needs.







Voice Quality Monitoring reduces the time and pain of troubleshooting by monitoring trends within the network, including: MOS, jitter, delay, and packet loss.

#### **NetVanta Multiservice Solutions**

- Modular all-in-one platforms supporting an Ethernet switch (Layer 2 or Layer 3), IP access router, PoE, firewall, and VPN in a single chassis
- Multiple models with 8-port or 24-port Ethernet switches
- Network options ranging from E1 to ADSL2+ and Ethernet
- Modular chassis supporting a variety of Network Interface Module (NIMs) and Dial Backup Interface Modules (DIMs)
- Integral stateful inspection firewall protects against Denial of Service (DoS) attempts
- VoIP-ready with Quality of Service (QoS), Class of Service (CoS), and SIP ALG
- Voice Quality Monitoring (VQM) for easy troubleshooting of VoIP traffic
- Wi-Fi access controller for centralized management of NetVanta WAPs

#### NetVanta 1335 Wi-Fi and PoE

Multiservice router with integral 24-port, Layer 3
 Ethernet switch

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- CompactFlash slot for configuration files, auto provisioning, and firmware
- 802.11a/b/g dual radio WAP
- 802.3af PoE switch delivering 15.4 watts per port
- Single Gigabit/SFP module slot for uplink or stacking
- VQM for MOS, jitter, delay and packet loss statistics

#### NetVanta 3448 and 3448 PoE

- Multiservice router with integral 8-port, Layer 2 Ethernet switch
- CompactFlash slot for configuration files, auto provisioning, and firmware
- Native content filtering or Websense integration
- VQM for MOS, jitter, delay and packet loss statistics
- Optional 802.3af PoE switch (NetVanta 3448 PoE)

#### NetVanta 6355

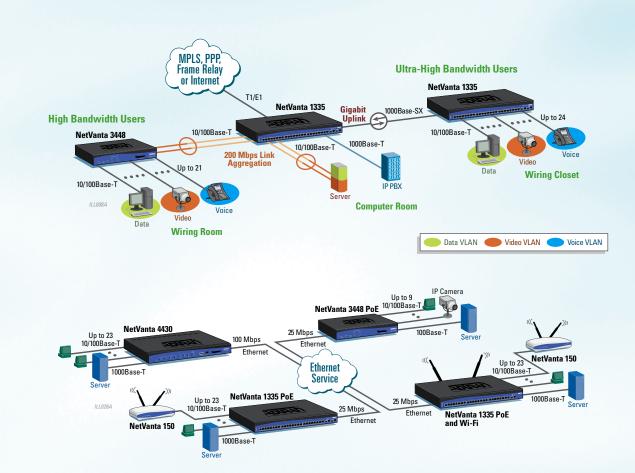
- IP Business Gateway with integral 24-port, Layer 2, PoE Ethernet switch
- Dual Gigabit/SFP module slots for uplink or stacking
- CompactFlash slot for configuration files and new firmware
- VQM for MOS, jitter, delay and packet loss statistics

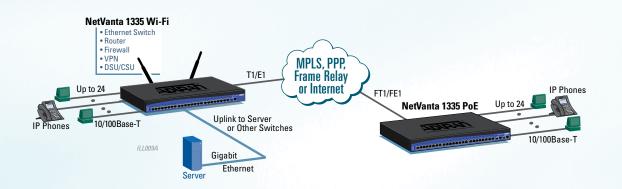
### **VLAN** and Layer 3 Switching

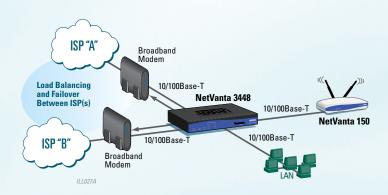
The NetVanta 1335 provides managed switching features, like Virtual LAN (VLAN) trunking and GVRP, to ease the configuration of larger VLAN networks. Up to 24 Fast Ethernet ports may be configured for 802.1Q VLAN functionality to provide separation of broadcast domains and functional work areas, while Layer 3 switching capabilities are used for high-speed inter-VLAN switching. The 1000Base-T or fiber Small Form-factor Pluggable (SFP) Gigabit uplink ports can be used for VLAN trunking to another switch or for link redundancy.

#### **High-speed Ethernet Services**

NetVanta multiservice solutions meet the demand for high-speed Ethernet service. The NetVanta 1335 allows Layer 3 fast switching to occur between sites and throughout the network. With additional Power over Ethernet (PoE) capabilities, NetVanta switch-routers can power various IP endpoints such as Wireless Access Points (WAPs), surveillance cameras, and IP Phones.







#### **Integrated Switching and Routing**

The ADTRAN NetVanta Series features unique all-in-one network access solutions that combine the functionality of a managed Ethernet switch and an access router into a single platform. The NetVanta 1335 Series offers 24 10/100Base-T Ethernet ports, an integral IP router, and 1000Base-T Gigabit ports for high-speed uplink and stacking requirements. In addition, these products include a stateful inspection firewall, Virtual Private Network (VPN), Voice Quality Monitoring (VQM), cable diagnostics, and backup capability, all in a single chassis. This single-platform LAN/WAN access solution reduces the number of devices and the costs associated with multiplatform solutions. Power over Ethernet (PoE) and 802.11a/b/g wireless connectivity are also additional options that can be incorporated into the NetVanta 1335.

# **Equal Cost Load Balancing** and Failover

For the business that needs guaranteed bandwidth, the NetVanta Series can share bandwidth between two Internet Service Providers (ISPs), by using "equal cost" load balancing. This eliminates the need to purchase a rarely used, dormant, backup link as a dedicated disaster recovery scheme. Data is transported to either ISP until one of the connections is lost. Then, data is automatically re-routed over the failover link, until service is restored. This maximizes bandwidth, allows for full usage of prepaid circuits, and provides a high-speed disaster recovery scheme if needed.

# Answering the growing demand for secure access to sensitive corporate data.

ADTRAN's NetVanta Series of Fixed-port Access Routers offers cost-effective IP switching and routing solutions for business-class broadband networks. Based on the widely deployed ADTRAN Operating System (AOS), this family of products offers a robust feature set with standards-based functionality and addresses the growing need for secure access to corporate information resources over the Internet.

## Guarantee Bandwidth with Disaster Recovery

The NetVanta 3100 Series provides an Ethernet or ADSL Wide Area Network (WAN) interface, fourport fully-managed switch, and an analog port for disaster recovery or dial-in for remote management. These products are full-featured, low-cost solutions perfect for switching, secure Internet access, and high-speed corporate connectivity using broadband access such as DSL or cable.

#### **Higher Bandwidth**

The NetVanta 3130 is a fixed-port, business-class ADSL router with an integrated Fast Ethernet fourport switch. It supports today's most advanced ADSL technology, ADSL2+, for applications taking advantage of its extending reach and higher bandwidth, up to 25Mbps. The NetVanta 3130 is perfect for Small- to Medium-sized Business (SMB) applications. No matter if they are bundled with a carrier service or employee deployed, they deliver secure, high-speed corporate connectivity.

#### **Work Remotely, Work Securely**

The NetVanta Series is designed for high-speed, cost-effective connectivity for remote offices, telecommuters and mobile users. All of these fixed-port routers support Virtual Private Network (VPN) and a firewall to ensure your remote employees can work without the security concerns normally associated with shared networks.



- Fixed-port ADSL-to-Ethernet access router
- 1 ADSL/ADSL2/ADSL2+ WAN interface
- Full-featured, managed 4-port 10/100Base-T switch
- Analog interface for dial backup or remote management
- Supports up to 5 IPSec VPN tunnels
- Wi-Fi access controller for centralized management of NetVanta WAPs



#### NetVanta 3120

- Fixed-port Ethernet-to-Ethernet access router
- 1 Ethernet WAN interface
- Full-featured, managed 4-port Ethernet switch
- Analog interface for dial backup or remote management
- Supports up to 5 IPSec VPN tunnels
- Wi-Fi access controller for centralized management of NetVanta Wireless Access Points (WAPs)

## NetVanta Switch Product Comparison

Supported     Not Applicable or Unavailable	Multis Access	Multiservice Access Routers		Ethernet Switches				Fixed-port Access Routers	
	NetVanta* 1335	NetVanta 3448	NetVanta 1234	NetVanta 1238	NetVanta 1534	NetVanta 1544	NetVanta 3120	NetVanta 3130	
Ports and Slots									
Modular NIM Slot(s)	1	1	-	-	-	-	-	-	
ADSL Interface(s)	Optional	Optional	-	-	-	-	-	•	
Onboard Ethernet Interface(s)	-	2	-	-	-	-	1	-	
Fast Ethernet Switch Port(s)	24	8	24	48	-	-	4	4	
1 Gbps Gigabit Ethernet Switch Ports	2 1 with Wi-Fi	-	4	4	26	24	-	-	
2.5 Gbps Gigabit Ethernet Switch Ports	-	-	-	-	-	4	-	-	
Features and Capabilities									
Stateful Inspection Firewall	•	•	-	-	-	-	•	•	
Switching Capabilities	Layer 3	Layer 2	Layer 2	Layer 2	Layer 2	Layer 3	Layer 2	Layer 2	
Port Scheduler	•	-	•	•	•	•	-	-	
Cable Diagnostics	•	_	•	•	•	1544 1544P	-	-	
Quality of Service (QoS)	•	•	-	-	-	•	•	•	
Class of Service (CoS)	•	•	•	•	•	•	•	•	
Power over Ethernet (PoE)	Optional	Optional	Optional	Optional	Optional	Optional	-	-	
802.10 VLAN Support	•	•	•	•	•	•	•	•	
Spanning Tree	•	•	•	•	•	•	•	•	
Storm Control	•	•	•	•	•	•	•	•	
802.1x Port Authentication	•	•	•	•	•	•	•	•	
802.11a/b/g Wireless	Optional	-	-	-	-	-	-	-	
Wireless Access Controller	•	•	•	•	•	•	•	•	
IPSec VPN	•	•	-	-	-	-	•	•	
Maximum VPN Tunnels	500	500	-	-	-	-	5	5	
n-Command Support	•	•	•	•	•	•	•	•	



"The NetVanta switch and multiservice access router products provided the functionality and reliability we needed at a value that could not be beat."

Tom Perry, Information Systems Manager Huntsville/Madison County Airport Authority

# A switching solution so remarkably versatile it makes your job easy.

#### **Multiple Management Options**

The NetVanta Series is a standards-based solution that merges seamlessly into existing networks and is easy to configure and operate. The NetVanta Command Line Interface (CLI) mimics the *de facto* industry standard, and is both familiar and easy to use. The CLI supports multiple configuration scripts to simplify setup of local and remote units. Dual firmware images provide quick and easy recovery. Other management options include RADIUS, SSH, SNMP, and a Web-based Graphical User Interface (GUI).



The NetVanta Command Line Interface has a familiar look and feel, eliminating retraining costs.

#### **Quality of Service**

As voice and data networks converge into a single communications network, Quality of Service (QoS) is of the utmost importance. QoS on the NetVanta switches support 802.1p Class of Service (CoS) standards, using Weighted Round Robin (WRR) and Strict Priority queuing. Mission-critical traffic may be marked or prioritized over non mission-critical traffic on a switch-port basis in the NetVanta 1000 Series products. Each switch supports frame tagging, as well as enforcement of tagged traffic received from trusted sources. Four egress queues (per port) are available for assigning traffic priorities using WRR.

#### **The Port Scheduler**

In an effort to conserve power and add security to today's networks, the Port Scheduler feature built into ADTRAN's PoE switches aids these features. The Port Scheduler feature allows system administrators to configure ADTRAN switch products to automatically activate and deactivate switch ports based on time of day. A common application enhances powering off nonessential Power over Ethernet (PoE) phones after business hours and reactivating the phones at the start of the next business day. Another application of the Port Scheduler feature enhances security by temporarily disabling the interface connected to a Wireless Access Point (WAP) to prevent network intrusion after business hours.



The Port Scheduler automatically activates and deactivates switch ports based on a defined schedule.

#### **Cable Diagnostics**

Troubleshooting the network infrastructure often has required a technician to be on-site. Yet, with the cable diagnostics troubleshooting tool built directly into the GUI of the NetVanta switches, administrators can perform several of these troubleshooting capabilities remotely. Cable diagnostics determines the length of the cable and if there are broken wires (opens) or touching wires (shorts) that could cause a unit to lose connectivity to a switchport.



**Cable Diagnostics** detects cabling problems like broken wires (an open) or touching wires (a short).



# Recognized and trusted: ADTRAN NetVanta solutions are the smart alternative for your network.

ADTRAN, Inc. is a leading global supplier of networking and communications equipment with an innovative portfolio of more than 1,700 solutions for use in the last mile of today's telecommunications networks. Widely deployed by carriers, distributed enterprises and Smallto Medium-sized Businesses (SMB), ADTRAN solutions enable voice, data, video, and Internet communications across copper, fiber and wireless network infrastructures. Our solutions are currently in use by every major U.S. service provider and many global ones, as well as by thousands of public, private and governmental organizations worldwide.

#### **Technical Questions**

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Training and Certification www.adtran.com/training

#### Simple, Reliable, and Affordable

When you need a networking solution that fits the unique connectivity requirements of your business, ADTRAN is the smart alternative. Our product portfolio offers a breadth of solutions, including a product suite that is tailored to the specific needs of SMB and distributed enterprise customers. With ADTRAN's award-winning and innovative NetVanta switches, routers, multiservice access routers, VPN solutions, wireless, and IP Telephony products, it is easy to find a quality solution that is perfect for your specific network needs.

NetVanta switch products are backed by an industry-leading warranty, best-in-class technical support from our team of degreed engineers, and is eligible for free firmware upgrades. As a TL 9000 3.0 and ISO 9001:2000 certified supplier supporting next-generation quality standards, the company maintains in-house labs for reliability, component and compliance testing — all with a focus toward customer satisfaction.

## **High-touch Customer Support** and Training

- Customizable Installation and Maintenance Services Program. The ADTRAN product warranty includes a return-to-factory repair and replacement program and free technical phone support. Technical support engineers are accessible for both pre- and postsales support.
- Comprehensive Training and Certification Services. ADTRAN provides innovative training solutions designed with a focus toward varying skill levels and job functions. Professional certification programs are designed to help customers structure and individualize continuing education needs. Access to the certification and training programs includes both free and fee-based options. Sessions are available both onand off-site, using Instructor-Led Training (ILT); Computer-Based Training (CBT); or virtual classroom training with real-time, Web-enabled classes.



IP Communication Platform with IP Phones



IP Business Gateway for Trunking and Hosted VoIP NetVanta 6000 Series



Multiservice Access Router NetVanta 3448, 1335



IP Business Gateways for Business Trunking Total Access 900/900e Series



Modular Access Router NetVanta 3000, 4000, 5000



Fixed-port Access Router NetVanta 3100





Wireless Access Point NetVanta 150



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