



**Solution
Overview:**

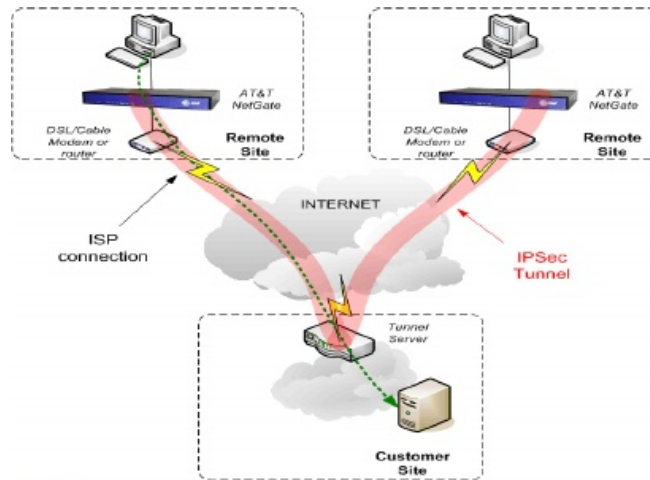
The **AT&T NetGate™8200** customer premises equipment (CPE) hardware device operates as a centrally managed firewall, router, VPN device and VLAN switch supporting both wired (Ethernet) and cellular wireless connections to the Internet. The **AT&T NetGate 8200** provides the customer's premises a fully managed security device protecting them from the Internet while providing them secure access to their enterprise network through a secure IPSec VPN tunnel with the ability to support the highest level of encryption (256 bit AES). The **AT&T NetGate 8200** is powered by the state of the art Cavium Octeon embedded processor providing nearly 45Mbits of hardware accelerated 3DES encryption support. The world class operating system utilized by the **AT&T NetGate 8200** is an embedded version of uClinux Linux provided and maintained by SG Division of Secure Computing, a McAfee company (www.uclinux.org).

The **AT&T NetGate 8200** is a fifth generation AT&T NetGate that has been developed in coordination of AT&T and SnapGear since 2001. New features are constantly being added by the development team with the ability to automatically push updates out to the devices in the field during the middle of the night. The fully managed AT&T NetGate is supported by a team of world class professionals with the ability to be notified by the AT&T NetGate proactively of problems occurring at the customer's location. With the SNMP support included in the AT&T NetGate the customer has the ability to monitor the AT&T NetGate securely through their VPN tunnel. The AT&T NetGate equipment provides a user friendly Web interface accessible through the local LAN or securely across the Internet. This interface provides the customer the ability to view diagnostic and configuration information. The VPN tunnels can also be viewed and controlled via the Web interface.

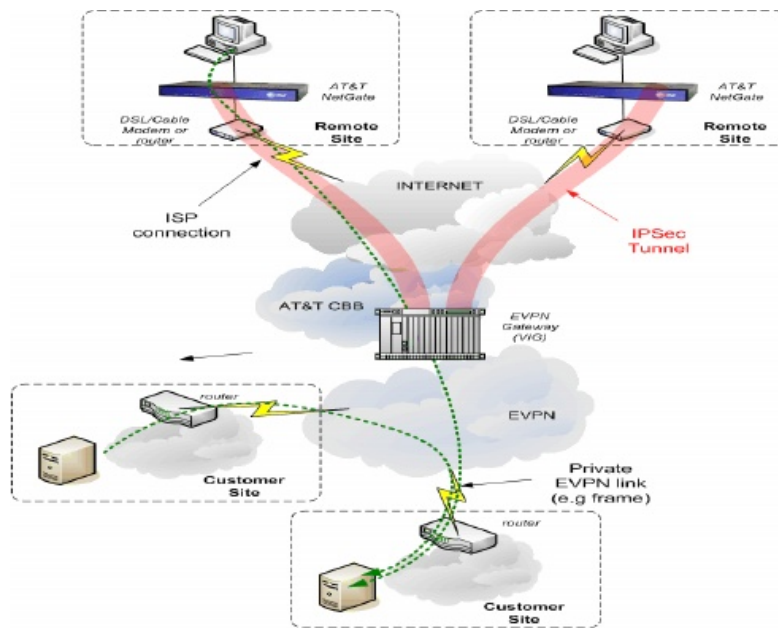
The scalability of the AT&T NetGate is provided through the central configuration and authentication engine developed and maintained by AT&T developers. There are nearly 70 thousand AT&T NetGates deployed around the world and there are multiple customers that have deployed more than a thousand AT&T NetGates per enterprise. This is a testament to the ease of enablement and commitment by AT&T to support the AT&T NetGate as a premier world class VPN CPE.

The **AT&T NetGate 8200 Supports Wi-Fi through a Wi-Fi extender**. The AT&T NetGate 8200 does not have cardbus slot and does not directly support Wi-Fi within the AT&T NetGate. Wi-Fi support is provided through an external Wi-Fi extender such as the Accelerated Concepts NetReach attached to the NetGate's LAN port.

**Typical
 Deployment:**



AVTS Service Connectivity



ANIRA Service Connectivity



Technical Specifications:	
Throughput	45 Mbps 3DES
Users	Standard offer supports 8,192 concurrent IP sessions with the capability to support up to 64,000 if configured. With the proper bandwidth, 300 - 400 users could be supported depending on the number of sessions used by each user.
VPN Compatibility	<ul style="list-style-type: none"> • AT&T SIG (Remote Access & Site-to-Site); • Nortel Contivity (Remote Access & ABOT); • Cisco Unity (Remote Access & Network Extension Mode); • AT&T VIG (ANIRA EVPN) • Central configuration of IPSEC tunnel encryption/authentication methods including: DES, 3DES, 128 bit AES, 192 bit AES, 256 bit AES, SHA-1, MD5 • AT&T Legacy services Secure IP, Dual Access and Fixed IP
Features	<ul style="list-style-type: none"> • Class of Service: the ability to mark each packet with DSCP markings, and the ability to shape the traffic inbound and outbound for each class of traffic. • Automatic WAN bandwidth determination logic used for Class of Service configuration • Centrally managed Stateful firewall • Port Address Translation NAT for Internet traffic • Multiple options for address translation when sending traffic through the VPN <ul style="list-style-type: none"> ○ No NAT: route natively (Internet or VPN) ○ Source NAT: NAT entire subnets of addresses ○ Source NAT plus PAT: NAT entire subnets of addresses with the rest of the subnet not NAT'd sent using a single PAT'd address ○ 1 to 1 NAT: NAT single addresses through central configuration • Port Forwarding on Internet and VPN interfaces • RIP routing available on the Local VLAN networks and used for communicating within the VPN tunnel to Nortel & SIG • VRRP on the Local VLAN interfaces • Multiple outbound tunnels (up to 4) • Local and remote access to the Web interface for configuration, diagnostic information and VPN tunnel control • Japanese language support for Web interface • Admin password and SSL security available to secure Web interface access • AT&T proprietary proactive monitoring alerts with active time of day windows • SNMP access using version 1, 2 or 3 for basic MIB-II support • SNMP Traps using version 1, 2 or 3 • Access to AT&T's proprietary reports through Focus • Rogue MAC detection on the Local LAN
VLAN Features	<ul style="list-style-type: none"> • Built in 8 port VLAN switch with the ability to support up to 8 VLANs internally or through 802.1Q trunking • VLANs and cascaded networks classification allowed for Internet Only and VPN access • Directed Broadcast to the VLAN interface supported through the VPN tunnel • Centrally managed DHCP Server • DHCP Relay
Wan Access Methods	<ul style="list-style-type: none"> • DHCP • PPPoE • Cellular wireless access provided through USB cellular modems provided by



	<p>Wireless provider (Primary or Backup access)</p> <ul style="list-style-type: none"> • Cellular access provided by the Accelerated Concepts NetBridge • Analog Dial provided through the internal V.92 modem (Primary or Backup access) • Secondary WAN port can be used in place of the standard cellular or analog backup. • Dial and Cellular backup logic to take over when primary broadband/cellular access is down. Centralized configuration controlling when to initialize backup. • Out of band analog dial into the device for support purposes
Tunnel Options	<ul style="list-style-type: none"> • Persistent • Traffic initiated • User initiated • VRRP controlled
Upgrades	<ul style="list-style-type: none"> • Centrally managed automatic upgrades from AT&T at no charge • Ability to lock a customer's device to a specific version of code
External Interfaces:	
Ethernet ports	8 X IEEE802.3u 100Base-T specifications VLAN switch capable LAN ports 2 X IEEE802.3u 100Base-T specifications WAN port IEEE802.3x Full Duplex Flow Control
USB slots	3
Modem	1 X V.92 analog modem
Supported USB Devices:	
3G/4G Cellular	Sierra Wireless USB 305, 308, 598U, 250U, 313U (AT&T Momentum) Novatel Wireless U760, 551L Huawei EC1261, EC169C, EC1750, E1815 E-Mobile D26HW, D31HW, D32HW Vodafone K3520-Z, K4505, K4511, K3765 Sprint 3G/4G USB U600 Pantech UML290 ZTE Rocket MF668
Environmental Operating Ranges:	
Operating Temperature	0 – 40 deg C
Relative Humidity	0 – 95% non condensing
Storage Temperature	-20 – 70 deg C
Power:	
INPUT	
Line voltage range	100-240V
Current	0.5A
Frequency	50-60 Hz
OUTPUT	
Line voltage range	12V DC +/-5%
Current	1.5A
Physical Specifications:	
Dimensions (L x W x H)	11.8" x 5.7" x 1.55"
Weight	2.75 lbs



Regulatory and Standards Compliance:	
Electrical Safety	CAN/CSA-C22.2 No. 60950-00 IEC60950-1:2005, 2nd Edition with the following group and national differences where applicable for AR, AT, AU, BE, BR, CA, CH, CN, DE, DK, FI, FR, GB, HU, IL, IN, IT, JP, KE, KR, MY, NL, NO, PL, SE, SG, SI, SK, and US
Immunity	EN55024:1998, +A:2001, +A2:2003 EN61000-3-2:2006 EN61000-3-3:1995 + A1:2001 + A2:2005
Emissions	FCC Part 15 Class A; ICES-003 Class A; EN55022:2006 Class A
Marks	CE C-tick FCC cTUVus