

Nortel Networks

Contivity 200 Series VPN Switches

For small offices and home offices

Enterprises have been quick to see the merits of the Internet and IP to extend their business communications to customers, employees, and partners. But the Internet was not designed with security in mind. Nortel Networks Contivity* products have led the market in addressing these enterprise IP security needs. Now the powerful security of the Contivity family can be extended to small office and home office sites. The Contivity 200 series of VPN switches are an affordable all-in-one solution for tying small satellite offices and teleworkers into a secure corporate network.



Contivity 221 and 251

The Contivity 200 series of VPN Switches are the answer to enterprises requiring low-cost secure connectivity across the Internet or managed IP networks. Designed for telecommuter and small office/home offices, the Contivity 200 series provides Virtual Private Networking (VPN), stateful firewall, IP routing, URL/content filtering, and optional integrated DSL in a compact easy-to-manage platform.

Consisting of Contivity 221 and 251 models, the Contivity 200 series provides options for small sites seeking secure Internet connectivity along with firewall-based perimeter defense functions in a single device. Both models have an integrated four-port Ethernet switch

for connecting local LAN devices. The Contivity 221 provides Ethernet-to-Ethernet connectivity while the Contivity 251 offers integrated ADSL conforming to international standards to allow global deployment.

Low-cost IP security for small sites

With its low-cost and integrated services, the Contivity 200 is an affordable device for small sites that might previously have felt such an IP security solution was too costly. It combines the advanced IP-VPN, stateful firewall, routing, and content filtering functions required by most telecommuter and small office/home offices when connecting to and accessing Internet

services. It further delivers these in a compact and quiet chassis that neatly fits into these environments.

Robust VPN and firewall

Advanced IPsec services with flexible tunneling and powerful encryption are designed to ensure the highest security for transmitted traffic. VPN encryption options include DES, 3DES, and AES to address the most stringent security requirement. A stateful packet inspection engine with up to 50 filter rules, built-in denial of service, logging, and e-mail alerting functions provides

perimeter defense against unwanted network intrusion. URL/content filtering further serves to block unwanted Web-based traffic that might disrupt remote site PCs.

Flexible site-to-site VPN services

The Contivity 200 VPN switches can flexibly and securely extend the corporate network to small remote sites. Supporting both IPsec and PPTP tunneling, the Contivity 200 can connect remote sites to a headquarters location, or can connect to other branch sites or to other enterprises in either a hub and spoke or small mesh configuration. The Contivity 200 can also connect to a larger central site Contivity in a variety of IPsec modes (e.g., branch office or client mode) to best fit an enterprise's VPN needs. As a member of the Contivity family, the Contivity 200 can also participate as an end-point in Contivity's Secure Routing Technology (SRT) framework.

Easy installation and management

The Contivity 200 can be quickly set up and managed through an advanced set of management options. A "client emulation mode" allows the Contivity 200 to use information on a central-site Contivity to minimize set-up time. An existing ID and password can be used to authenticate the Contivity 200 and IP address, WINS, and DNS server can be dynamically assigned without user intervention. The Contivity 200 also

supports Web-based and command line interfaces for flexible configuration and SNMP for remote monitoring. Last, the Contivity Configuration Manager (CCM) can act as a central provisioning system for up to 2,500 Contivity 200 or other Contivity devices.

In summary, if you are looking for a robust IP security solution for small offices and homes offices—either for your own enterprises or as part of a managed service solution, you can count on the Contivity 200 VPN switch. It can provide a complete standalone IP security solution or connect to other members of the Contivity family of Secure IP Services Gateways.

Key benefits:

- Low-cost IP security for small sites
- Robust VPN and firewall features
- Flexible site-to-site VPN services
- Integrated ADSL option for global deployment
- Easy installation and management

Key Contivity 200 features and benefits

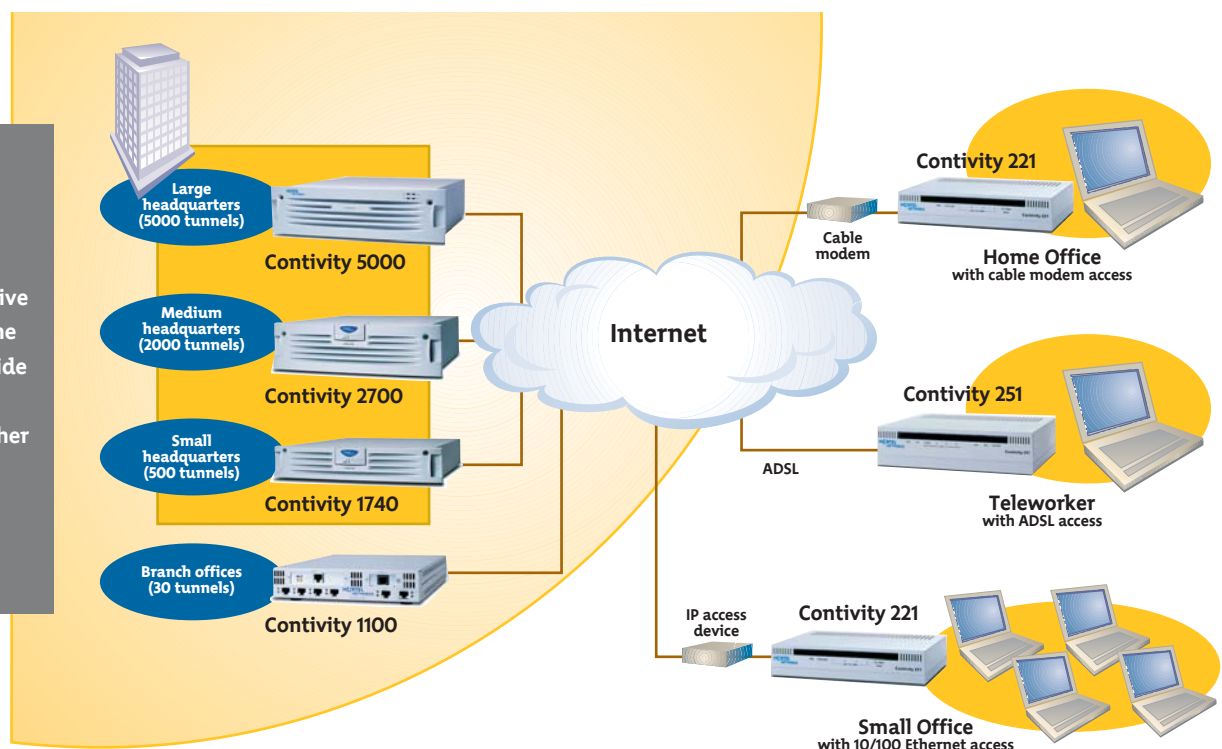
Features	Benefits
Extensive IPsec VPN capabilities	Five VPN tunnel capacity along with advanced IPsec features make it a versatile site-to-site VPN solution for telecommuters and small offices.
Powerful stateful firewall	Full stateful inspection with up to 50 rules, denial of service, logging, and e-mail alerting tools prevent unwanted network intrusion.
Integrated 4-port 10/100 Ethernet switch	User PCs and LAN devices can be directly connected—no need for separate Ethernet switch or hub.
Contivity VPN client emulation mode	Simplifies remote set-up by emulating "VPN client" connection to another Contivity. IP attributes are dynamically assigned, and existing remote access VPN information can be re-used.
Content (URL) filtering	Blocks ActiveX, Java applets, and cookies, and disables Web proxies so that network administrators can tailor remote site access policies to be consistent with rest of enterprise.
Dial back-up through console/auxiliary port	Allows continued data transmission in cases where the primary IP connection goes away.
PPPoE client, DHCP, DNS proxy, and NAT support	Simplifies IP-VPN deployment over Internet and broadband DSL connections.
Integrated ADSL option	Conforming to a wide range of international standards, the Contivity 200 can be readily connected into virtually any global service provider's ADSL service

Technical specifications—features and capabilities

Contivity 200 VPN Switches

IP routing and network addressing	<ul style="list-style-type: none"> • RIPv1 and v2, ARP, ICMP • PPPoE (two sessions) • DHCP client and server • Dynamic DNS and DNS proxy • NAT – many-to-many, many-to-one, one-to-one, port forwarding
VPN tunneling protocols	<ul style="list-style-type: none"> • IPsec, including AH and ESP with main and aggressive mode IKE • PPTP • Up to 5 VPN tunnels
Encryption	<ul style="list-style-type: none"> • DES, 3DES, 128-bit AES • 3DES uses 3 independent keys; 168-bit key length (effective strength of 128 bits)
Authentication services	<ul style="list-style-type: none"> • Data authentication via SHA-1 or MD-5 • Shared secret
Stateful firewall	<ul style="list-style-type: none"> • Stateful packet inspection of up to 50 rules • LAN to LAN, LAN to WAN, WAN to WAN • Denial of Service (DoS) protection • Attack logging and e-mail alerts • ALGs for CU-SeeME, FTP, H.323, IPsec, RealAudio, VDoLive
Management	<ul style="list-style-type: none"> • Contivity Configuration Manager (CCM) provides multi-device configuration for up to 2,500 Contivity devices, including the Contivity 200 series • Web-based browser (HTTP) configuration • Command-line interface (CLI) • SNMP monitoring/alerts
Environmental compliance	<ul style="list-style-type: none"> • FCC Class B • Underwriters Laboratory • CSA • FCC Part 68 (for xDSL devices) • CE

Serving the price-sensitive, small user segment of the site-to-site IP-VPN market and delivering comprehensive IP security functions, the Contivity 200 can provide connectivity to headquarters offices and other branch locations that have larger Contivity Secure IP Services gateways.



Technical specifications—physical and operational

Contivity 221—up to 5 tunnels

Interfaces

- 10/100 Mbps Ethernet (RJ-45)
- 4-port 10/100 Mbps Auto-sensing Ethernet switch
- Console port (RS-232, DB-9f)

Physical

Length: 7.4" (188 mm)
Width: 5.0" (128 mm)
Height: 1.4" (36 mm)
Weight: 10.9 oz. (310 grams)

IPsec performance

2.2 Mbps for 3DES

Contivity 251—up to 5 tunnels

Interfaces

- 4-port 10/100 Mbps Ethernet switch
- ADSL – G.992.1 Annex A, Annex B, or U-R2
- Console port (RS-232, DB-9f)

Physical

Length: 9.1" (230 mm)
Width: 6.3" (161 mm)
Height: 2.1" (53 mm)
Weight: 1.0 lbs. (468 grams)

IPsec performance

2.2 Mbps for 3DES

ADSL compliance:

- ITU G.992.1 (G.DMT)
- G.992.1 Annex A – ADSL over POTS
- G.992.1 Annex B – ADSL over ISDN
- ITU G.992.2 (G.Lite)
- RADSL – ANSI T1.413 Issue 2
- DSL Forum document TR-042 ATM
- Transport over ADSL
- G.hs 994.1
- G.ploam G.997.1
- Auto negotiation rate adaptation
- RFC 2364 – PPP over AAL5
- RFC 2684 – MPoA; both bridged and routed encapsulation
- British Telecom SIN 329; BT Broadband IP Product requirements for End User NTE equipment
- Deutsche Telekom U-R2 Interface Specification
 - ADSL over ISDN circuits
 - PPPoE over ADSL, encapsulated using MPoA
- RFC 2516 – PPPoE
- Traffic shaping UBR, CBR
- ATM Forum UNI 3.1/4.0 PVC

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www.nortelnetworks.com

For more information, contact your Nortel Networks representative, or call 1-800-4 NORTEL or 1-800-466-7835 from anywhere in North America.

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1-888-GSA-NTEL

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