

**Nortel Networks**

# **Contivity 100 VPN Switch**

## **for small offices and home offices**

**Service providers and enterprises have been quick to see the merits of IP (Internet protocol) virtual private network (VPN) services to connect multi-location enterprises and supply chains.**

**Nortel Networks has led the customer-premises IP VPN market with a family of Contivity systems that support up to 5000 simultaneous tunnels. Now the power of Contivity VPN switches can be cost-effectively extended to connect small offices and home offices.**

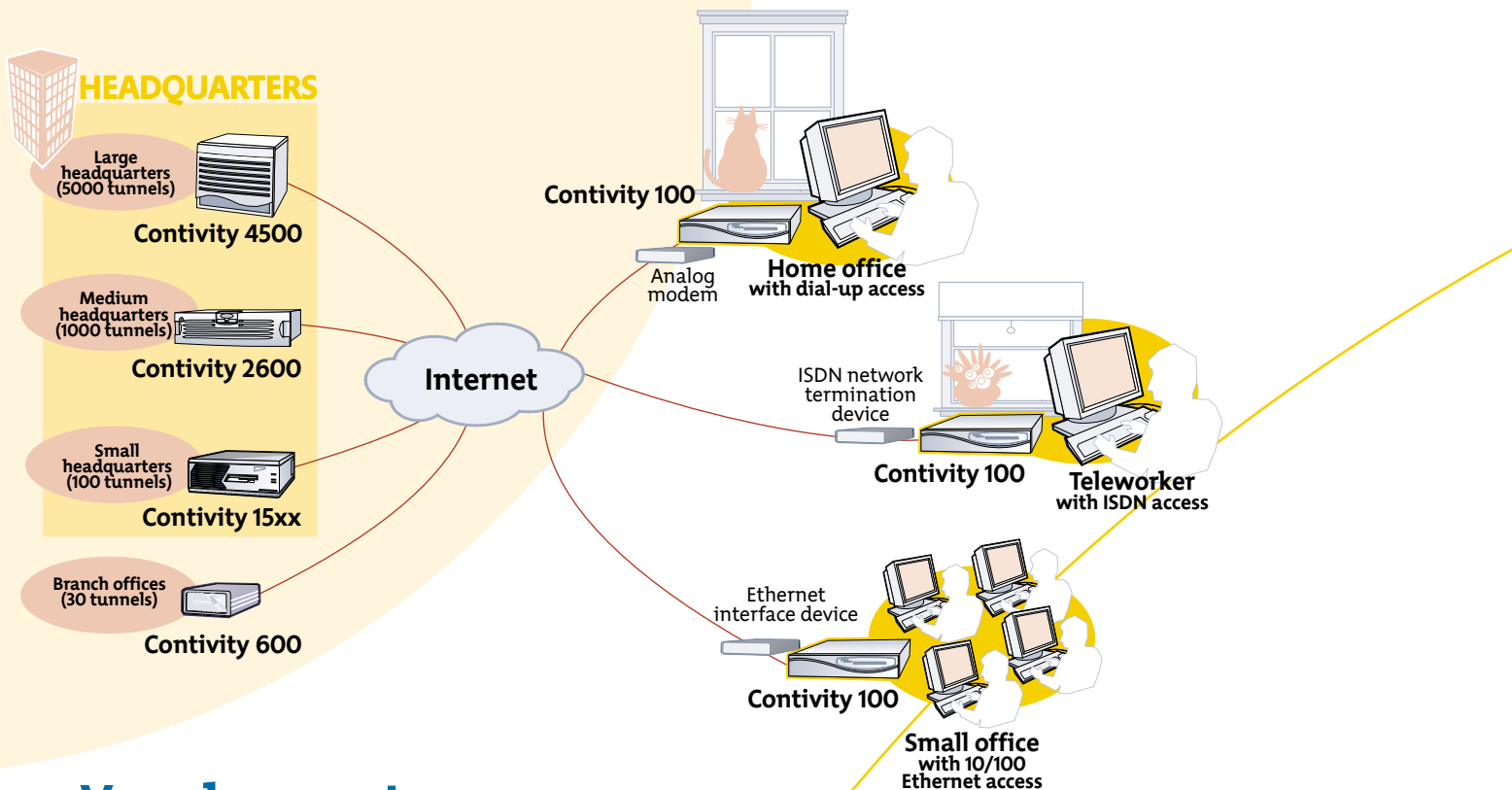
**Announcing the low-cost Contivity 100 VPN Switch, the affordable solution for setting up secure, encrypted, tunnels—for incorporating small satellite offices and teleworkers into a secure corporate network.**

The **Contivity 100 VPN Switch** is the perfect answer for enterprises that have hundreds or thousands of small locations that need to be securely connected to headquarters and branch office sites.

With support for encrypted, secure tunnels, the Contivity 100 is ideal for connecting small offices or teleworkers to headquarters and branch locations that use Contivity 600, 1500-series, 2600, or 4500 models.

Now enterprises can affordably connect their smallest sites, using secure, encrypted IPsec tunneling over the Internet.

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# Very low cost, secure VPN connectivity for small offices and home offices

The Contivity 100 offers a complete set of site-to-site IP VPN features in a compact, desktop package—including secure access to the Internet (and branch offices) through tunneling, firewall protection, authentication features, and encryption of data.

## What makes the Contivity 100 exceptional?

### *Low cost, secure tunneling*

The Contivity 100 supports IPSec branch tunnels—each one wrapping the data stream within the format of the IPSec protocol, thereby enabling corporate communications to traverse a private path on the public Internet.

### *Protection from hackers*

The Contivity 100 supports firewalling by proxy. This is a technique by which a server funnels all user requests to and from the Internet. By not opening a straight path between two networks, firewalling by proxy prevents a hacker from obtaining internal addresses and details of the private network and its users.

### *Access for authorized users only*

The Contivity 100 accepts incoming traffic through authenticated, tunneled connections.

User authentication is provided through SHA-1 (Secure Hash Algorithm-1) or MD5 (Message Digest 5)—algorithms that create digital signatures. Contivity 100 users can choose the authentication method best suited to their application requirements.

Furthermore, management and update functions for the Contivity 100 are protected by PAP (Password Authentication Protocol) and CHAP (Challenge Handshake Authentication Protocol) security.

Both methods involve accessing a table of user IDs and passwords on a server to verify users when they log in. CHAP provides increased security by encrypting user IDs and passwords before transmitting them to the verification server.

### *Advanced encryption to protect data traffic privacy*

All Contivity 100 connections are encrypted for privacy, using both DES (Data Encryption Standard) and triple DES with pre-shared keys.

DES is an efficient method that uses a 56-bit encryption key. Triple DES provides considerably more security by using multiple keys to encrypt, decrypt, and encrypt again.

**Serving the price-sensitive, small-user segment of the site-to-site IP VPN business market—to provide connectivity to headquarters offices and other branch locations that have larger Contivity VPN switches**

# Cost-effectively extend the performance and security of Contivity VPNs to sites with 1-10 people

Users can pick the security method that best suits their application requirements.

## *Flexible deployment options*

Each Contivity 100 model comes with a dedicated 10/100 Ethernet port and seven 10/100 switch ports for office devices, plus a range of LAN/WAN interface options, including:

- 10/100 Ethernet
- V.90 analog modem (single and dual versions)
- ISDN (with and without NT1 network termination)
- xDSL high-speed digital subscriber line (1Meg Modem)

The basic desktop system has 16MB of RAM and is physically small enough to fit onto any desktop, while being sturdy enough to handle extremes in temperature and humidity.

Using standards-compliant IPSec tunneling, the Contivity 100 is interoperable with BayRS routers, other Contivity VPN Switches, and Instant Internet systems.

## *Scaled and priced for the smallest applications*

Designed for small offices and home offices, the Contivity 100 is ideal for satellite sites with 1 to 10 users. Functioning as spokes in a hub-and-spoke configuration, there may be hundreds or even tens of thousands of Contivity 100 systems connecting to larger Contivity systems at corporate headquarters or large branch offices.

The Contivity 100 is a perfect fit for small satellite offices and telecommuters that have no localized network equipment or servers (besides the Contivity device) and need secure access to corporate sites for important network tasks.

## *Easy installation and automated LAN adaptation*

Users can begin accessing the Internet immediately without changing workstation settings or changing the network configuration in any way. Existing subnetted intranets do not need to be changed or disrupted. Automatic detection of DHCP on the WAN side enables quick, configuration-free installation. Auto-DHCP avoids conflicts with existing DHCP servers during installation.

## *Integrated management*

Remotely manage your Contivity 100 systems via an advanced, Web-based graphical user interface or CLI (command line interface) via Telnet.

All management functions and firmware updates can be performed over the Internet with password protection for full security.

## **The industry-leading Contivity family**

The Contivity 100 VPN switch is the newest entry in a complete product family that includes models scaled to suit applications from home offices to large corporate headquarters:

- The **Contivity 4500**, the premium offering in the Contivity family, provides secure, efficient VPN connectivity for up to 5000 tunnels.
- The **Contivity 2600** provides full-featured performance and security for locations that require up to 1000 tunnels.
- The **Contivity 1500 series** (1510, 1520, and 1530) offers unusually flexible solutions for office centers, campuses, or branch offices needing up to 100 tunnels.
- The cost-effective **Contivity 600** is targeted for branch offices requiring up to 30 simultaneous tunnels.
- The economical **Contivity 100** provides basic connectivity for small offices and home offices requiring a limited number of simultaneous tunnels.

This robust and easily managed technology made Nortel Networks the global leader in the VPN gateway market, according to a 1Q2000 market analysis report from Synergy Research Group.

## Technical specifications

### Contivity 100

Up to 5 simultaneous tunnels (recommended)

#### Components

*Processing and memory:*

Pentium-class, 300 MHz processor (expandable)  
16MB RAM  
8MB Flash memory

*Interface options:*

Two 10/100 Ethernet LAN ports  
Serial port—out-of-band management or PPP  
Single and dual analog ports  
ISDN  
Dual and triple Ethernet  
1-Meg Modem (DSL)

*Software and documentation:*

Contivity 100 software  
CD and on-line HTML documentation

In summary, if you're looking to provide robust, secure, and profitable VPN services for small offices and home offices—either for your own enterprise or to offer as a managed service—count on the Contivity 100 VPN Switch, working with other members of the proven Contivity family.

#### VPN capabilities

Tunneling: IPSec  
Routing protocols:  
RIP v1, RIP v2, static  
Encryption: DES, Triple-DES  
Management: HTML-based user interface, command line interface (CLI) via Telnet  
Security: Stateful inspection in NAT, five-proxy firewall



#### Physical

Width: 12 in. (30.5 cm)  
Height: 2.64 in. (6.7 cm)  
Depth: 14.5 in. (36.8 cm)  
Weight: 8 lb (3.6 kg)  
Electrical: internal 145W,  
100 to 240 VAC

#### Operating

Temperature: 50-90°F  
(10°C to 35°C)  
Relative humidity: 10-90%  
noncondensing  
350 BTU/hour @ 240 VAC

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

[www.nortelnetworks.com](http://www.nortelnetworks.com)

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55152.02/11-00

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