

RN5c

Security & Networking Innovation

The RN5C is an innovative security and data networking product designed to leverage the existing network infrastructure in order to provide a very cost effective solution for mid/small offices or sections of larger offices.

The RN5C enables customers to segment a LAN into 5 Secure Zones – each Zone having stateful, fine-grained firewall policies between itself and each of the other Zones in both directions. Access to each Zone is granted only to users who have permission to access that specific Zone. Each Secure Zone can be dedicated to a department, application, server farm, or other LAN segment.

The RN5C overlays onto an existing network without requiring reconfiguration of existing network elements. Additional security layers such as per-user authentication, virtual zones, and policy-based security-on-demand are included.

In addition to segmented network security, the RN5C also provides Bandwidth Management for Quality of Service, Layer 2-4 Switching and full Accounting and Management.

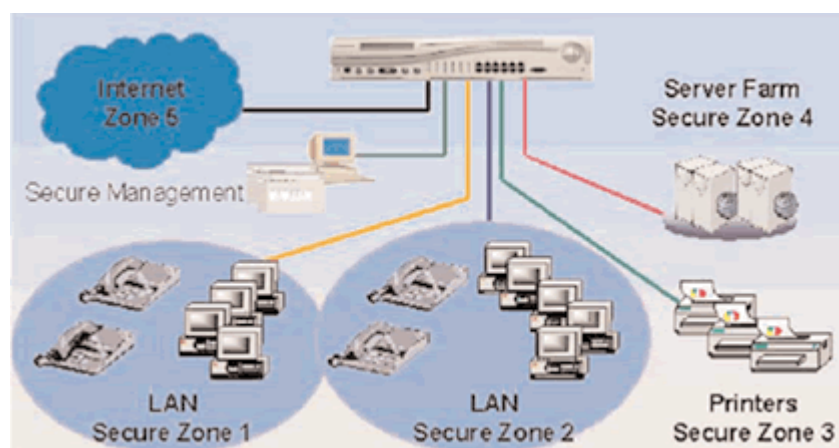
Benefits:

- Replace many boxes with a single device
- Add multiple layers of security to an existing network
- 5 Secure Zones; Per-User Authentication
- Bandwidth Management for QoS/SLA
- LAN auto-discovery
- Advanced Layer 2/3/4 switching
- Accounting
- Redundancy
- Integrated Web based Management System
- SNMP V1 / V2 / V3 Compliant

Applications:

- Mid/small office internal and external network security
- Security for specific areas in large offices
- Internal and external enterprise LAN security
- Group users into "areas of trust"
- Data Centers / Server Farm Load Balancing
- Isolation of viruses, worms, etc.
- Special security policies for Wireless LANs, conference rooms, and guests
- Insurance and regulatory requirements for gov't, financial services, education, healthcare
- Voice-over-IP Quality of Service

Application Example



SPECIFICATIONS

Security

- 5 security zones
- Per-user Authentication and Authorization
- Physical Zones or Virtual Zones
- Policy-driven security-on-demand
- Access Control Lists
- Stateful Firewall, Full NAT / Half NAT
- DoS Prevention
- Redirection to IDS
- 1024 ACL Rules
- Stateful firewall by TCP proxying
- Classification based on source IP, dest. IP, source port, dest. port, protocol, TCP flags, TCP options, ICMP Message types, TCP/FTP/UDP proxying
- Logging

IQoS / SLA Bandwidth Management

- Contracts
- Unique Split Subnets
- Multiple bandwidth levels
- Priority through TOS 7-tuple classification
- 1024 bandwidth contracts
- TOS marking for supporting QoS
- DiffServ compatible
- Traffic policing & guaranteed bandwidth per contract

Load Balancing

- Round Robin
- Weighted Round Robin
- Least connections
- Persistency: Cookie, SSL, Client IP HTTP, HTTPS, FTP (active and passive)
- RFC-822 based application
- UDP application based on 4-tuple
- Common UDP applications including DNS
- Up to 1024 Logical Servers

Switching/VLANs

- Wire-speed L2 switching
- Wire-speed L3 forwarding, static routing
- VLAN support
- Unique VLAN subnets splitting
- Multiple default gateways routing with dead gateway detection
- IEEE 802.3x, 802.1D, 802.1P, 802.1Q

Auto Discovery

- Subnet identification
- Router discovery
- Host IP discovery
- Services discovery
- Network topology discovery
- Host topology discovery
- Host-to-IP determination
- Services discovery for telnet, DNS, ftp, HTTPs, SMTP, POP3

Accounting

- Three definable accounting bands
- Instrumentation based on:
 - Packet Classification
 - 7-tuple classification
 - 1024 bandwidth contracts
- Real-time counters (Tx, Rx, packets, bytes) - Packets dropped on purpose
- Per-minute counters

Server Health Monitoring

- ICMP ping
- TCP connection verification
- Active content verification for FTP, HTTPs:
 - 5 URLs per server farm for ACV testing
 - FTP: configurable login ID
 - HTTPs o client/server hello test

Technical Specifications

- Power input: AC 100-240 VAC, 50/60 Hz
- Power Consumption: 150W max (2.2A)
- Operating Temperature: 32-113°F (0 to 45° C)
- Operating Humidity: 5% to 95% non-condensing
- Dimensions (h, w, d): 2U 3.5" x 18" x 18"
- Weight: 11.3 lb (5.1 kg)
- Interfaces: 12+1 10/100
- BaseT ports RJ-45 connectors and RS232 serial port DB9 connector