

RN20

Security & Networking Innovation

The RN20 is an innovative networking product designed to leverage the existing network infrastructure in order to provide a very cost effective-solution for Enterprises, MTU/MDU, and Managed Service Providers networks.

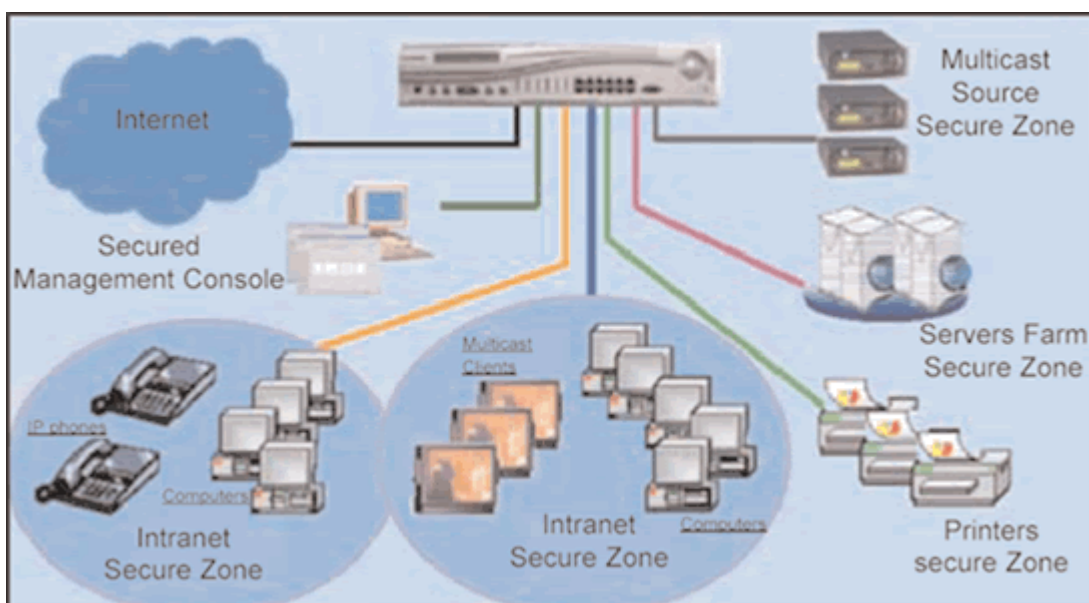
RN20 enables customers easily and cost-effectively to deploy and manage multiple Layer 2-7 services for up to 12 secured zones. Ranch Networks' Secure Zone technology logically separates a LAN into multiple networks each of which can have independent Securites, QoS policies, Load balancing rules, and Administrative access. Secure Zone can be dedicated to enterprise business units, departments, applications, or to each dwelling /tenant in MTU/MDU environment.

Ranch Networks' unique solution enables a network architecture that can deliver the same IP services as multiple, single-purpose, dedicated appliances without the cost and complexity typically required to acquire, integrate, and manage such complex systems.

Benefits:

- Replace many boxes with a single device
- Add multiple layers of security to an existing network
- 12 Secure Zones; Per-User Authentication
- Bandwidth Management for QoS/SLA
- Load Balancing of IP/TCP/UDP
- Real-time network/server monitoring
- Advanced Switching and Multicasting
- Usage-based Accounting
- Redundancy
- Integrated Web based Management System
- SNMP V1 / V2 / V3 Compliant Zone Multicast Clients

Application Example



SPECIFICATIONS

Security

- 12 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 & Subcontracts
- Unique Split Subnets
- Multiple bandwidth levels
- Priority through TOS 7-tuple classification
- 1024 bandwidth contracts
- 8 bandwidth sub-contracts per bandwidth contract
- 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

IP Multicasting

- IP Multicasting based on RFC 1112/2236/2933
- Hardware Assisted
- Fine-grained control on IP Multicasting
- Up to 1Gbps of IP Multicasting traffic
- Access Control based on VLAN, Physical Port, Source /Destination IP

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

Server Health Monitoring

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

Accounting

- Three definable accounting bands
- Instrumentation based on:
 - Packet Classification
 - 7-tuple classification
 - 1024 bandwidth contracts and 8 subcontracts
 - Real-time counters (Tx, Rx, packets, bytes) - Packets dropped on purpose
 - Per-minute counters

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: 16 lb (7.2 kg)
- Interfaces: 12+1 10/100
- BaseT ports RJ-45 connectors and RS232 serial port DB9 connector