FireWall IRX Router

Livingston
Enterprises, Inc.

The easy, affordable way to protect your company's network.

Another

piece of

Livingston's

Secure Access

Security has become the number one obstacle to doing business on the Internet. No matter what business you're in, you need access to what the Internet provides, but you cannot afford the risk of compromising your own valuable data. You want to offer and market a World Wide Web page to the outside world, but you can't risk exposing corporate secrets to Internet snoopers. You need protection from attacks such as SATAN and IP spoofing. You also want to make company resourcesavailable to employees worldwide, but you need to protect those resources by securing your internal Novell IPX or TCP/IP network.

The easiest, most affordable way to defend your network – both externally and internally – is with a Livingston FireWall IRX Router. It allows you to control exactly what type of traffic can enter and exit your network.

Our FireWall technology, which physically isolates your network and provides input and output packet filtering, and packet logging, has been tested – and proven – worldwide. Many Internet Service Providers (ISPs) have come to depend on Livingston technology in delivering Internet connections to their customers (individuals, businesses, and schools).

total

remote

access

solution.

<u>FIREWALL IRX BENEFITS</u>

- ALLOW INTERNET USERS ACCESS TO YOUR WEB PAGES OR FILE TRANSFER PROTOCOL (FTP) SERVERS BUT NOT TO YOUR PRIVATE NETWORKS.

- LOG AND CONTROL INTERNAL OUTBOUND ACCESS. DETERMINE THE IMPACT OF ACTIVITIES SUCH AS WEB "SURFING" ON OFFICE PRODUCTIVITY.

- PREVENT ATTACKS FROM OUTSIDE WORLD.

COMMUNICATIONS SERVERS • ACCESS ROUTERS • DIAL-UP ROUTERS • FIREWALL ROUTERS • PC CLIENT SOFTWARE • SECURITY SERVERS • MANAGEMENT UTILITIES
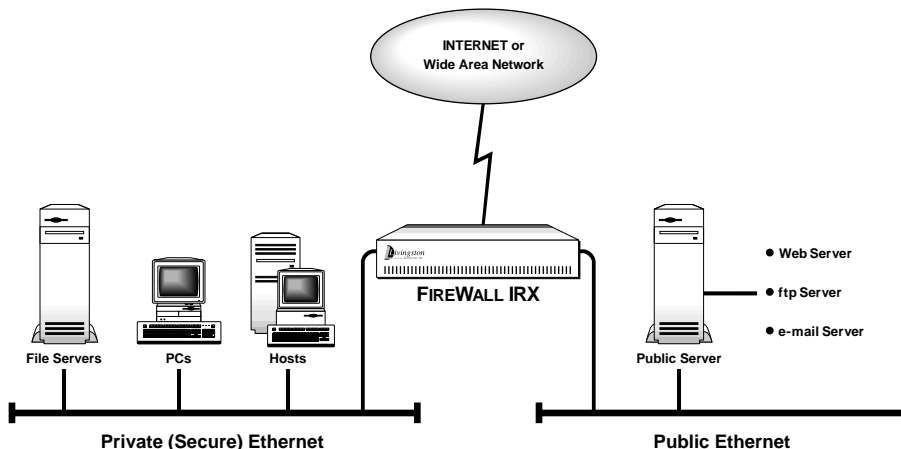
Flexible and Expandable Router

The FireWall IRX Router supports the full range of services offered by ISPs, including dial-up analog (14.4 Kbps, 28.8 Kbps, (using V.32bis and V.34 modems)), dial-up synchronous (ISDN and Switched 56), and dedicated synchronous (from 56Kbps through fractional T1/E1 to full T1 or E1 service, leased line or Frame Relay). The benefit is that you can start with a low-cost dial-up service and migrate to higher-speed connections when you need to without adding another router or additional software.

The FireWall IRX Router has two Ethernet ports, which allows you to use one port for your "public" network, where you can offer customer or marketing services, such as Web pages and ftp servers accessible from the Internet, and the other for your "private" network, where you connect your internal hosts, servers and PCs that you want protected from Internet attacks and snoopers. In addition to the two Ethernet ports, the FireWall IRX Router has an asynchronous wide-area network (WAN) port and a synchronous WAN port. The asynchronous port can be used as the primary dial-up router port, a back-up dial-up router port, a dial-in port for network management, or as a one-port communications server for remote-user LAN connectivity. It has all the features found in Livingston PortMaster Communications Servers, including access security using Livingston's RADIUS (Remote Authentication Dial-In User Service).

Sophisticated Packet Filtering

The Livingston FireWall IRX Router provides the most advanced packet filtering available – permitting or denying the passage of inbound and outbound packets through network interfaces. A filter is defined using multiple rules that allow you the flexibility to decide precisely which traffic comes into or out of any connected network. You can filter according to the source and/or destination address – network, subnet or individual device. You can also filter according to protocol services, such as file transfer, e-mail, World Wide Web, or Usenet. Or you can filter for both address and protocol in any combination.

Livingston filters can even deny or permit passage according to the origination and connection status. For example, you can define the filter to *only* allow passage of ftp packets from the Internet if they are in response to an ftp session originating from your own private network. You can also use the filters for Novell IPX networks to restrict access to networks, file servers, print servers, or other resources.

Powerful Packet Logging

A major disadvantage of conventional packet-filtering routers is that they have no logging capabilities, so the security manager has no way of knowing when the network is under attack. The Livingston FireWall IRX Router can log the activation of filtering rules, so the network administrator can track network break-in attempts or audit usage of protocol services and outside network resources accessed by internal users.

You can specify which rules in a filter to log, so that you only log those packets of interest. That way you can quickly find the information you need without having to spend a lot of time looking at lengthy logs of non-critical information. When the FireWall IRX Router has a message to log, it sends it to a host supporting syslog or the FireWall IRX Router's asynchronous port.

Easy-to-Use Management Software

The FireWall IRX Router is easy to configure using Livingston PMconsole administration software, which is included. Available for five platforms, including Microsoft Windows, Sun Sparc, and IBM RS/6000, PMconsole provides a menu-driven, graphical user interface for configuring filters as well as for configuring, monitoring and controlling the router. PMconsole, which is supported using either TCP/IP or Novell IPX protocols, can be used to manage all Livingston FireWall IRX Routers and PortMaster Communications Servers on an entire network.

Total Support

Because we were early innovators in network security, all Livingston products are built using proven technology. You can count on their reliability. What's more you can count on free lifetime technical support and free software upgrades for the life of the product. Livingston products are available worldwide through authorized value-added resellers and Internet Service Providers. They can help you select the products you need to configure your system for maximum security. And Total Access. Sure and Simple.™

FireWall IRX
Filter Criteria:
- *Source address*
- *Destination address*
- *Connection status*
- *Protocol service*
  - *TCP*
  - *IP*
  - *IPX*
  - *UDP*
  - *ICMP*
  - *Telnet*
  - *SMTP*
  - *NNTP*
  - *FTP*
  - *DNS*
  - *NTP*
  - *HTTP*
  - *Gopher*
  - *WAIS*
  - *Rexec*
  - *Rlogin*
  - *Rsh*
  - *Rdist*
  - *Lpr*
  - *RPC*
  - *Archie*
  - *SNMP*
  - *and others*

SPECIFICATIONS

GENERAL

Flash memory
Local or network booting
SNMP (MIB 2)
Inbound (reverse) Telnet
PAP and CHAP authentication
Ping utility
Traceroute utility
IPX SAP filtering

ROUTING SUPPORT

Concurrent TCP/IP and Novell IPX routing
Unnumbered WAN links
Static routes
On-demand dial-up routing
RIP routing protocol

WAN SERVICES AND PROTOCOLS

Dial-up analog (V.32 bis and V.34 modems)
Frame Relay
ISDN (with external terminal adaptor)
Leased-line services (56K, 64K, fractional T1/E1, T1/E1)
Switched 56
PPP
V.25 bis

ASYNCHRONOUS PORT SUPPORT

LAN-to-LAN dial-on-demand routing
Dial-in TCP/IP
Dial-in Novell/IPX
Back-up router port
User dial-in security (stored locally or centrally via RADIUS protocol)
SLIP
PPP
VJ header compression

ASYNCHRONOUS PORT   ETHERNET PORTS FOR ETHER 0

WAN PORT
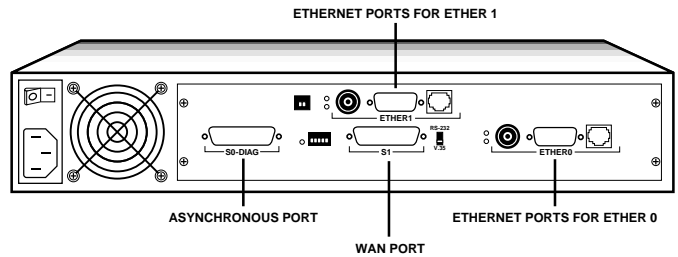
LIVINGSTON FIREWALL IRX ROUTER

with one synchronous port (up to 2.048 Mbps), one asynchronous port (115.2 Kbps), and two Ethernet ports (with AUI, BNC, RJ-45 connectors).

HARDWARE

Two Ethernet ports with three connector choices per port:
   AUI connector
   Built-in thinnet (BNC)
   Built-in 10BaseT (RJ-45)
One synchronous serial port
   Up to 2.048 Mbps
   Externally clocked (from CSU/DSU)
   RS-232 and V.35 interfaces (with included adapter cable)
One asynchronous serial port
   Up to 115 Kbps
   RS-432/232 interface
   DB-25 connector
   DTR, DSR, DCD, RTS, CTS, TXD, RXD signalling
Dimensions
   Length: 11.5 in (29.2 cm)
   Width: 16.8 in (42.7 cm)
   Height: 3.2 in (8.1 cm)
   Weight: 12.4 lb (5.7 kg)
Power requirements (auto sensing)
   110 VAC ±10%, 47-63 Hz, 1.0 A
   220 VAC ±10%, 47-63 Hz, 0.6 A
Environmental operating range
   Temperature: 41F to 113F (5C to 45C)
   Humidity: 20% to 80%
Agency approvals
   FCC, UL, CSA, CE
Optional rack mount kit

LIFETIME SUPPORT
F   R   E   E
SOFTWARE UPGRADES

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