

Ingate Firewall

For enterprises of all sizes, the **Ingate® Systems** Firewalls offer all the features of a robust data firewall, plus complete support for Session Initiation Protocol (SIP) to enable enterprises to adopt VoIP safely and securely. They offer secure, complete support for live IP communications, including VoIP, IM and video. SIP-based live person-to-person communications do not traverse common NATs and firewalls, as they are not specifically designed to accept the SIP-protocol. Ingate SIP-capable Firewalls address this issue and enable SIP-communication to traverse the NAT/firewall and reach users while maintaining control over the enterprise network. The Ingate Firewalls also solve far-end NAT traversal to extend the SIP capabilities within the corporate network to remote workers.

INGATE FIREWALL

Maintaining the highest level of VoIP-security, **Ingate's** SIP-proxy-based Firewalls deliver maximum control over SIP-signaling, traffic and network security, creating one truly converged network for both data and VoIP. With **Ingate** products, enterprises can use VoIP and other live communications on the LAN and globally over the Internet or private IP networks. **Ingate Firewalls** are available in five different models; 1190, 1500, 1550, 1650 & 1900.

All **Ingate Firewalls** are fully featured, supporting stateful inspection and packet filtering with rules defined and maintained by the network security administrator utilizing the GUI. **Ingate Firewalls** include an encrypted Virtual Private Network (VPN) termination module. In addition to complete SIP support, Ingate Firewalls have a proxy for all standard protocols, including TCP, UDP, FTP and DHCP.

TRUSTED NETWORK SECURITY FOR VOIP

Ingate's SIP-proxy architecture grants fully secure traversal of the SIP-traffic. The ports for the media streams are only opened between the specific parties of a call and only for the duration of the call. The SIP-proxy inspects the SIP packets before sending them on. TLS and SRTP encryption ensures privacy, making call eavesdropping, call hijacking and call spoofing harder to do. **Ingate** also supports authentication of users and servers.

SUPPORT FOR SIP TRUNKING

More and more Internet Service Providers offer a SIP trunk - a combined Internet and voice connection. For enterprises using an IP-PBX, SIP trunks are an ideal cost-saving solution as they no longer need local PSTN gateways or costly PRIs/BRIs. The service provider provides the PSTN connection. However, in order for SIP trunks to be successful, SIP traffic (as well as all other data traffic) must be able to traverse the enterprise firewall. **Ingate's** SIP Trunking software module, available for **Ingate Firewalls**, enables firewall and NAT traversal using the built-in SIP proxy, allowing the enterprise to connect to the SIP trunk.

In addition, **Ingate Firewalls** and the **Ingate** SIP proxy deliver advanced security for all SIP communications, including those via a SIP trunk. Ingate products also help ease compatibility issues between the IP-PBX and Internet telephony service provider.

CHOOSE THE RIGHT FEATURES FOR YOUR NETWORK

Ingate offers several other add-on software modules that allow you to tailor the Firewall to meet the specific demands of your business. Ingate Quality of Service (QoS) sets priorities to different kinds of data and allocates bandwidth for varied purposes - for instance, giving priority to VoIP.

Ingate Remote SIP Connectivity extends the SIP capabilities of the enterprise to employees working remotely (home office workers, road warriors, etc.). Remote SIP Connectivity manages the traversal of the remote NAT from the central **Ingate Firewall** and also includes a STUN server.

Ingate VoIP Survival adds a whole new dimension to hosted VoIP service by securing full redundancy in a SIP-based hosted IP-PBX environment all the way out to the customer premises. It serves as a backup to enhance the reliability and availability of a VoIP application platform. **Ingate** Advanced SIP Routing provides the ability to fully control and route SIP traffic in an advanced and flexible manner. The module can handle least cost routing, enabling enterprises to make calls globally for local fees.

GLOBAL VOIP CONNECTIVITY FOR YOUR IP-PBX

Ingate Firewalls open up a world of possibilities and cost savings when used with a SIP-based IP-PBX. Businesses can not only connect to a SIP trunk, but also route telephone calls via Ip, between branch offices, home workers, offices and others using SIP-based VoIP. With an **Ingate Firewall**, the enterprise is no longer limited to voice; communication can also include video, instant messaging, presence and more...

FREE SOFTWARE UPGRADES FOR THE FIRST YEAR

The **Ingate Firewalls** have no data user restrictions. Software upgrades are free for the first year. Thereafter, an annual licensing fee will apply. New software versions can be downloaded quickly and easily online from the **Ingate** website. For more information, visit us at www.ingate.com.



TECHNICAL SPECIFICATIONS IN GATE FIREWALLS	1190	1500	1550	1650	1900
Interfaces 10/100 bit/s	3	0	0	0	0
Interfaces 10/100/1.000 bit/s	0	4	4	4	6
Interfaces SPF mini Gbic	0	0	0	0	
Redundant power supply	no	no	no	no	yes
Flashdisk for system operation	yes	no	no	no	yes
Dimensions cm	8 146 44	430 369 44	430 369 44	430 369 44	430 485 88
Certifications	C FCC U	C FCC U	C FCC U	C FCC U	C FCC U
Performance					
Throughput bit/s 1.500 byte packets	50	330	380	385	00
Packets per second 46 byte packets	4.500	8.500	75.000	15.000	30.000
VPN tunnels	5	100	00	400	800
3 S168-bit bit/s 1438 byte packets	10	45	55	65	110
A S1 8-bit bit/s 1438 byte packets	15	60	80	85	190
SIP connection setup SIP + RTP	0.15s	0.15s	0.15s	0.15s	0.15s
RTP data delay 10 bit/s 100 bit/s	0.19 0.08ms	0.19 0.08ms	0.19 0.08ms	0.19 0.08ms	0.19 0.08ms
Number of concurrent RTP sessions voice sessions G711	40	150	300	650	1.500
Concurrent encrypted RTP sessions both SRTP and TS	0	75	150	330	750
Busy hour call attempt	36.000	7.000	7.900	7.900	34.000
Administration					
Automatic check for new releases	yes	yes	yes	yes	yes
Configuration options: ebGUI TTP TTP Sand C ISS serial cable	yes	yes	yes	yes	yes
CP client and PPPoE	yes	yes	yes	yes	yes
CP server	yes	yes	yes	yes	yes
SNMP	yes	yes	yes	yes	yes
Number of VLANs 80.1 compliant	16	3	64	18	56
Internal log to	yes	yes	yes	yes	yes
Logging to PCAP file	yes	yes	yes	yes	yes
Syslog	yes	yes	yes	yes	yes
E-mail events	yes	yes	yes	yes	yes
Support for fail over multiple ISPs	yes	yes	yes	yes	yes
Terminal a IRA IUS server authentication for IPsec GUI and SIP	yes	yes	yes	yes	yes
Unlimited data user	First year	First year	First year	First year	First year
Firewall functionality					
Stateful inspection	yes	yes	yes	yes	yes
Packet filtering	yes	yes	yes	yes	yes
CP proxy	yes	yes	yes	yes	yes
Proxies for TCP/UDP and FTP	yes	yes	yes	yes	yes
Flexible NAT and PAT	yes	yes	yes	yes	yes
SIP functionality					
SIP proxy	yes	yes	yes	yes	yes
SIP registrar	yes	yes	yes	yes	yes
SIP traffic to private IP addresses NAT/PAT	yes	yes	yes	yes	yes
TLS encryption	yes	yes	yes	yes	yes
SRTPs descriptions and micro-soft encrypted RTP	yes	yes	yes	yes	yes
Billing and authentication for SIP users from terminal IRA IUS server	yes	yes	yes	yes	yes
SIP connect compliance	yes	yes	yes	yes	yes
Add-on modules					
SIP Trunking connecting an IP-PBX to an ITSPs SIP trunk	yes	yes	yes	yes	yes
Remote SIP Connectivity Far-end NAT-passing incl. IStUN server	yes	yes	yes	yes	yes
oS band with	yes	yes	yes	yes	yes
Advanced SIP routing flexible routing for SIP traffic	yes	yes	yes	yes	yes
VoIP survival VoIP redundancy internet connection fails	yes	yes	yes	yes	yes