Ingate E-SBC

Ingate Firewall 1210

Leveling the playing field for smaller enterprises, Ingate® Systems offers the Ingate Firewall® 1210, a powerful tool that offers small businesses, branch offices and home workers complete support for IP communications based on Session Initiation Protocol (SIP). With the Firewall 1210, these businesses can leverage the same productivity and cost-savings benefits of SIP-based Voice over IP (VoIP), instant messaging (IM) and a host of other IP applications, as large corporations.

The Firewall 1210 solves the Network Address Translation (NAT) traversal issues inherent in SIP communications, and offers both far- and near-end NAT traversal to extend the SIP capabilities within the corporate network to remote workers.

In addition, Ingate offers the only SIP proxy-based solution on the market today, delivering maximum control over SIP signaling, traffic, and network security. With Ingate products, enterprises can use VoIP and other live communications on the LAN and globally over the Internet or private IP networks.

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The Ingate Firewall 1210 has four ports and offers a 200 Mbit/s throughput. Small and versatile, the 1210 is perfect for smaller office environments – with no fan; the Firewall is virtually silent, which means there's no need for a separate server room. The management interface for the products is the same Web-based Graphical User Interface (GUI) that has been cited by Ingate customers and the media for ease-of-use.

Included with the Ingate Firewall 1210 are five SIP traversal licenses, allowing up to five calls to traverse the firewall at the same time. Additional traversal licenses can be purchased at any time.

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 the complete SIP support, Ingate Firewalls have a proxy for all standard protocols, including TCP, UDP, FTP and DHCP.

Trusted Network Security for VoIP
The Ingate Firewall 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 when communicating, making call eavesdropping, call hijacking and call spoofing harder to do. Ingate also supports authentication of users and servers.

Intrusion Detection System/Intrusion Prevention System (IDS/IPS) has become a crucial security measure for enterprise deployments of SIP. IDS/IPS works in tandem with Ingate's existing security technologies, further strengthening security for VoIP, SIP trunking, Unified Communications and other SIP applications.

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 Firewall 1210, 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 Enhanced Security allows support for Transport Layer Security (TLS) and encrypted SRTP (Secure Realtime Transport Protocol).

The SIP Registrar Module allows for making the Ingate Registrar the primary registration server.

Add Global VoIP Connectivity to your IP-PBX
The Firewall 1210 opens up a world of possibilities and cost savings when used with a SIP based IP-PBX. Businesses can route telephone calls via IP, not only between branch offices and home workers, but also to offices and other users using SIP-based Internet telephony. No longer limited to telephony voice, communication can also include video, instant messaging, presence and more.

Why Ingate?

- For secure SIP trunks, secure VoIP, secure network
- SIP normalization: resolving interoperability issues between IP-PBX and ITSP, for simplified installations
- Secure NAT traversal
- Proven, reliable

Technical Specifications Ingate Firewall

Feature	Ingate Firewall 1210	Ingate Firewall 1510	Ingate Firewall 1560	Ingate Firewall 1660	Ingate Firewall 2950	Ingate Firewall 2960
Interfaces (10/100/1000 Mbit/s)	4	4	4	4	6	6
Redundant power supply	No	No	No	No	Yes	Yes
Type of disk	Compact Flash	HDD	HDD	HDD	RAID 1	RAID 1
Dimension WxDxH (mm)	300x145x44	426x365x44	426x365x44	426x365x44	772x426x43	772x426x43
Certifications	CE, FCC, UL	CE, FCC, UL	CE, FCC, UL	CE, FCC, UL	CE, FCC, UL	CE, FCC, UL
Power consumption (typical)	25W	100W	100W	100W	200W	200W
Power supply 100 – 240 VAC, 50-60 Hz	External	Internal	Internal	Internal	Internal	Internal
Performance						
Throughput (Mbit/s) (1500 byte packets)	200	500	700	1000	4 500	4 500
Packets per second (46 byte packets)	10 000	28 500	50 000	90 000	300 000	300 000
VPN tunnels	30	100	200	400	1600	1600
3DES (168) (Mbit/s) (1438 byte packets)	20	45	55	65	130	130
AES (128-bit) (Mbit) (1438 byte packets)	30	60	80	85	270	270
SIP Connection set up (SIP + RTP), max calls/s	15	30	30	30	50	50
RTP data delay (10Mbit/s/100 Mbit/s)	0.19/0.08 ms	0.19/0.08 ms	0.19/0.08 ms	0.19/0.08 ms	0.19/0.08 ms	0.19/0.08 ms
Number of concurrent calls (20 ms voice packets)	50	150	400	1000	1800	3000
Secure VoIP sessions (TLS + SRTP)	50	75	150	330	900	900
Automatic check for new releases	Yes	Yes	Yes	Yes	Yes	Yes
Management/Configuration options: Web GUI (HTTP, HTTPS) and CLI (SHH, serial cable)	Yes	Yes	Yes	Yes	Yes	Yes
DHCP client and PPPoE	Yes	Yes	Yes	Yes	Yes	Yes
DHCP server	Yes	Yes	Yes	Yes	Yes	Yes
SNMP V2, V3	Yes	Yes	Yes	Yes	Yes	Yes
Max number of VLANs (802.1q compliant)	16	32	64	128	512	512
Internal log to HD	No	Yes	Yes	Yes	Yes	Yes
Logging to PCAP file	Yes	Yes	Yes	Yes	Yes	Yes
Syslog	Yes	Yes	Yes	Yes	Yes	Yes
E-mail events	Yes	Yes	Yes	Yes	Yes	Yes
Support for failover multiple ISPs	Yes	Yes	Yes	Yes	Yes	Yes
External RADIUS server authentication for IPsec, GUI and SIP	Yes	Yes	Yes	Yes	Yes	Yes
Unlimited data users	Yes	Yes	Yes	Yes	Yes	Yes
Free software upgrades	First year	First year	First year	First year	First year	First year
Firewall functionality						
Stateful inspection	Yes	Yes	Yes	Yes	Yes	Yes
Packet filtering	Yes	Yes	Yes	Yes	Yes	Yes
DHCP proxy	Yes	Yes	Yes	Yes	Yes	Yes
Proxies for TCP, UDP and FTP	Yes	Yes	Yes	Yes	Yes	Yes
Flexible NAT and PAT	Yes	Yes	Yes	Yes	Yes	Yes
VPN functionality						
X.509 certificate or shared secret	Yes	Yes	Yes	Yes	Yes	Yes
Generating of X.509 certificates for clients	Yes	Yes	Yes	Yes	Yes	Yes
PPTP server	Yes	Yes	Yes	Yes	Yes	Yes
IPsec (3DES, AES, NULL, MD5 and SHA1)	Yes	Yes	Yes	Yes	Yes	Yes
SIP Functionality						
SIP proxy	Yes	Yes	Yes	Yes	Yes	Yes
SIP registrar	Yes	Yes	Yes	Yes	Yes	Yes
SIP traffic to private IP addresses (NAT/PAT)	Yes	Yes	Yes	Yes	Yes	Yes
Billing and authentication of SIP users from an external RADIUS server	Yes	Yes	Yes	Yes	Yes	Yes
SIP Connect compliance	Yes	Yes	Yes	Yes	Yes	Yes
Add-on modules						
SIP Trunking (connecting an IP-PBX to an ITSPs SIP-trunk)	Yes	Yes	Yes	Yes	Yes	Yes
Remote SIP Connectivity (Far-end NAT Traversal incl STUN-server)	Yes	Yes	Yes	Yes	Yes	Yes
QoS (bandwidth limitation and prioritization)	Yes	Yes	Yes	Yes	Yes	Yes
Enhanced Security (SRTP and TLS)	Yes	Yes	Yes	Yes	Yes	Yes
VoIP Survival (VoIP redundance if Internet connection fails)	Yes	Yes	Yes	Yes	Yes	Yes
SIP Registrar (Ingate is used as the primary SIP registrar)	Yes	Yes	Yes	Yes	Yes	Yes