

Ingate E-SBC

Software Firewall/SIParator®

– The Secure Software Enterprise SBC

Adopting global SIP communication is a simple process with the Software Firewall/SIParator® - the solution for enterprises that want to deploy Ingate products on their own hardware platforms. Like all Ingate E-SBCs the Software Firewall/SIParator® makes secure SIP-based communications – including VoIP, SIP trunking and UC – possible. Harness the benefits of Unified Communications while maintaining current investments in security technology with Ingate's cost-effective E-SBCs.

The Software Firewall/SIParator® is the software version of Ingate's E-SBCs, the Ingate Firewall and Ingate SIParator®. It is an ideal solution for IP-PBX vendors, system integrators and other customers that want to deploy a large number of Ingate products on their own hardware platform. The Software Firewall/SIParator® can be installed on a virtual machine or natively (for higher performance) on many supported servers. It can also run directly on x86 Linux servers (industry-standard PC architecture), thus being integrated with IP-PBXs or media gateways.

The Software Firewall/SIParator® is the same software that runs on Ingate's award-winning E-SBC hardware products. The software is available in a range of sizes and can handle up to thousands of concurrent sessions, or simultaneous VoIP calls, at any given time.

Trusted Network Security for VoIP

Ingate's architecture boasts a true SIP proxy controlling the built-in firewall which grants secure traversal of the SIP traffic. Ingate E-SBCs support Transport Layer Security (TLS) for secure SIP signaling. They also support encrypted SRTP (Secure Real-time Transport Protocol), providing a high level of security for live data with advanced encryption, confidentiality, message authentication and replay protection. When combined, these protocols further shield users from eavesdroppers, hackers and spoofers.

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.

The Software Firewall/SIParator® can work hand-in-hand with an existing network firewall to allow SIP traffic to traverse the enterprise edge. It can also be configured with firewalling functionality to provide enterprise security for all SIP and data traffic. To learn more about the Software Firewall/SIParator® and supported hardwares, please visit www.ingate.com.

Support for SIP Trunking

More and more Internet Telephony Service Providers (ITSPs) offer SIP trunks. The SIP trunk can be delivered over the public internet or a dedicated connection and both these models are supported by Ingate's E-SBCs.

All Ingate E-SBCs with the Ingate SIP Trunking software module, make secure SIP trunking possible by solving Network Address Translation (NAT) traversal, allowing the enterprise to connect to the SIP trunk. They also solve compatibility issues between the IP-PBX and ITSP, ensuring a quick and simple deployment.

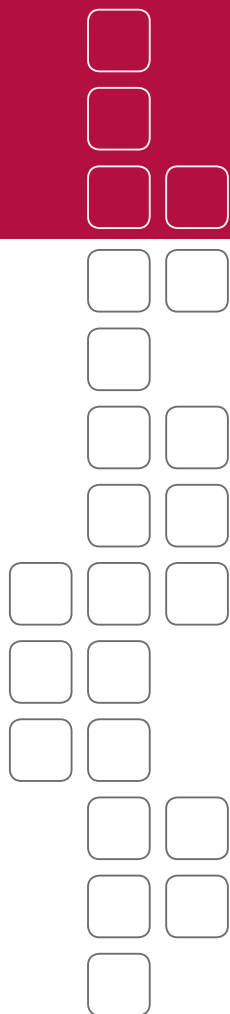
Choose the Right Features for Your Network

Ingate's add-on software modules allow you to tailor the Ingate E-SBC to meet the specific demands of your business:

- **Ingate SIP Trunking** allows enterprises full use of their IP-PBXs and not only communication over IP within the enterprise but also outside the enterprise.
- **Ingate Remote SIP Connectivity** allows remote and mobile workers to work from behind a NATing device at home, a hotel or wireless hotspot and make and receive calls using the IP-PBX located at the corporate headquarters.
- **Ingate Enhanced Security** allows support for TLS and encrypted SRTP.
- **VoIP Survival** allows an enterprise using a centrex or hosted-PBX solution to fail over to the Ingate product, to enable internal calls and redirect outside calls to a local PSTN gateway.
- **Quality of Service (QoS)** ensures excellent voice quality by setting priorities and allocating bandwidth properly.
- **SIP Registrar** allows for making the built-in Ingate Registrar the primary registration server and permits registrations up to the limits of the hardware platform.

The Ingate Advantage

Ingate's standards-based solutions are interoperable with most major suppliers of SIP products. Ingate supports SIPconnect, allowing the enterprise to successfully connect to SIPconnect-compliant SIP trunking service providers quickly, easily and securely.



Technical Specifications Software Firewall/SIParator®

Available Models	SMALL Software Firewall/SIParator® 25/50	MEDIUM Software Firewall/SIParator® 150/400/1000	LARGE Software Firewall/SIParator® 1800/3000/5000/10000
Max number of concurrent calls:	25/50	150/400/1000	1800/3000/5000/10000

Specifications of the Software Firewall/SIParator® Requirements					
Software operating environment:	Capacity:	Software Firewall/SIParator® management ethernet interfaces:	Supported ethernet card emulation for the virtual machine:	Configuration management:	Software monitoring:
Can be installed on a virtual machine or natively on x86 Linux servers (industry-standard PC architecture)	Depends on the server platform	Max. 16, min. 2 interfaces.	E1000 compatible cards, VMXnet3 for VMware and Virtio for KVM1	Management/Configuration options: Web GUI (HTTP, HTTPS) and CLI (SSH, serial cable)	- SNMP V2, V3 - Internal logging to HD - Logging to PCAP file - Syslog - E-mail events - Automatic check for new software releases

Feature
General
External RADIUS server authentication for GUI and SIP
Support for failover multiple ISPs
Unlimited data users
First year free software upgrades
Security
Signaling and media encryption
Stateful deep packet inspection
Access control (Granular)
IDS/IPS
Interoperability
SIP support, standard protocols (including TCP, UDP, FTP and DHCP)
Encryption Interworking
Interoperable with most PBXs and ITSPs, view list at www.ingate.com
SIP Functionality
SIP Proxy
SIP Registrar
SIP Traffic to private IP addresses (NAT/PAT)
Billing and authentication of SIP users from an external RADIUS server
B2BUA

Feature
Firewall Functionality
Stateful inspection
Packet filtering
DHCP proxy
Proxies for TCP, UDP and FTP
Flexible NAT and PAT
VPN Functionality
X.509 certificate or shared secret
Generation of X.509 certificate for clients
PPTP server
IPsec (3DES, AES, NULL, MD5 and SHA1)
Add-on modules
SIP Trunking (connecting an IP-PBX to an ITSP's SIP Trunk)
Remote SIP Connectivity (Far-end NAT traversal incl. STUN-server)
QoS (bandwidth limitation and prioritization)
Enhanced security (SRTP and TLS)
VoIP Survival (VoIP redundancy if Internet connection fails)
SIP registrar (Ingate is used as the primary SIP registrar)

Why Ingate?

- Reliable products
- High level of security
- Interoperable with most PBXs and ITSPs
- Simplified installations
- Cost effective products

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