SIP-capable Firewalls and SIParators

Summary of Products and Benefits

Ingate offers products that serve the needs of enterprises who wish to introduce SIP based communications into their networks. We offer two product lines: the **Ingate Firewall®** that can handle data as well as SIP sessions; and our **SIParato®** which works in parallel with an existing firewall to introduce SIP communications to an enterprise. We offer each of these products on four hardware platforms. The smallest of our devices can handle a maximum of 30 simultaneous SIP sessions; our largest unit will handle up to 800 simultaneous media traversals.

Our products are compatible with communications equipment from other vendors who offer SIP based Voice over IP equipment. Our list of proven interoperability is extensive and includes the major PBX vendors such as Avaya, major phone and soft-client products; PSTN gateway vendors; hosted PBXs and many other components and vendors too numerous to mention.

Our products are designed to solve the issues related to SIP traversing the NAT (Network Address Translator) which is a part of all enterprise class firewalls. The NAT translates between the public IP address(es) of the enterprise, and the private IP addresses which are only known inside the Local Area Network (LAN). These private IP addresses are created to enable all of devices to have an IP address, and also as one of the security layers of the enterprise network.

Our products solve this problem and more:

- **Near-end NAT traversal** for bringing SIP communications into a network. But as a proxy we not only provide this basic functionality, but in conjunction with it we:
    - o Monitor the SIP signaling ports
    - o Inspect everything received on those ports to insure that it is proper SIP signaling
    - o Rewrite the headers to enable the SIP signaling to reach the intended recipient on the inside of the network at their private IP address
    - o Dynamically open the media ports to admit voice or video on both UDP and TCP ports

- o Rewrite the headers to deliver the media to the appropriate destination
- o Rewrite the headers of outbound traffic to keep the private IP addresses hidden
- o Close the media ports when the session is finished
- **Maximum control over filtering and admittance policies.**
- **Encryption for communication privacy**
  - o Support encrypted SIP signaling using TLS as an added network protection feature and to keep Instant Messages private
  - o Decrypt encrypted media and either pass it to the LAN in the clear, or re-encrypt for even greater security.
- **Remote SIP Connectivity (RSC)** (optional priced module) enables employees or customers to work from behind a NATting device and make and receive SIP calls using the PBX located at the corporate headquarters. This module includes:
  - o STUN server on board to support STUN clients, if available
  - o Far-End Nat Traversal which is used when a STUN client is not available, or if the remote user is behind a symmetric NAT. With the RSC enabled, the Ingate unit negotiates through the far-end NAT device and keeps a pin-hole alive as long as the client is registered.
- **Advanced SIP Routing (ASR)** (optional priced module) enables the product to provide even greater functionality for control for the enterprise or by user, including:
  - o Matching on various header information
  - o Options to rewrite the Request URI on forwarding
  - o ENUM lookup
  - o Defined parameters by user
  - o Common blacklists
- **VOIP Survival** (optional priced module) to allow an enterprise that is using a CENTREX or hosted PBX solution to fail over to the Ingate device at their site to enable internal calls, and re-direction of outside calls to a local PSTN gateway.
- **Quality of Service** (optional priced module) to allow the enterprise to tag certain packets and then to prioritize the delivery of those packets. This is useful to insure good voice quality.
- **Standards Based Solution** interoperable with most major suppliers of SIP products including Avaya, 3Com, Pingtel, Cisco, Snom, Audiocodes, Vegastream, and many others.
- **Competitive Pricing**
  - o Firewall (full support for data and voice) and SIParator product lines to offer the greatest flexibility in designing the customer implementation
  - o Four product models in each product line to enable customization of the solution to the size of the organization and the budget
  - o A pay as you grow pricing model that allows you to add users or media traversal licenses when you need them, up to the limits of the hardware platform selected.