

Ingate® Systems

Global VoIP Connectivity to the Avaya SES

The convergence of voice and data is bringing productivity benefits to businesses of every size. Connecting people, information and processes in real-time is a reality now available with proven interoperable solutions such as the Avaya SIP Enablement Services (SES), a feature-rich server that allows businesses to operate voice and video communications on the Local Area Network (LAN) and products from Ingate® Systems, allows enterprises to access SIP trunking services and communicate over the Internet with confidence. This combination of Ingate technology and Avaya's Session Initiation Protocol (SIP)-based SES allows the enterprise to connect to anyone on the Internet, sharing files, doing whiteboard sessions or just talking.

However, traditional firewalls will not admit SIP traffic. Ingate solutions preserve the firewall policies, while admitting authorized SIP traffic and related media. Working seamlessly with the Avaya SES, Ingate Firewall® and Ingate SIParator® products provide the tools necessary for the enterprise to adopt Global VoIP (Voice over IP) while maintaining the highest levels of network protection.

The Benefits of Global VoIP Connectivity: Remote Workers

Whether they work in a small branch office, operate from a home office all or some of the time, or travel and work from a hotel or wireless hot spot, remote workers can use the Avaya SES from wherever they find themselves.

By connecting the Avaya SES to the Internet with an Ingate product, the office phone is always in reach, improving productivity via document sharing, presence and Instant Messaging (IM). This is possible today with Ingate's Remote SIP Connectivity module installed on either an Ingate Firewall or SIParator -- without requiring any configuration changes on the remote network.

The Benefits of Global VoIP Connectivity: Branch Offices

Many companies with disbursed operations may want to invest in a large Avaya SES installation to support all of their branches from one location. Ingate VoIP Survival can be configured to manage calls within the branch in the event that the centralized Avaya SES is not accessible, which means your branches will still be able to communicate. This feature ensures emergency calls, and even that important sales call, can still go through. Ingate VoIP Survival automatically detects if the hosted server is unavailable and takes over the communication with the help of the dynamically downloaded user data. With a local PSTN Gateway, the branch can make and receive calls to and from the traditional PSTN network even if the link to the SES is unavailable for an extended period.

The Benefits of Global VoIP Connectivity: Vendors and Partners

Collaboration is becoming more important as companies form alliances to bring products and services to market, and vendors in many parts of the world are engaged in the development process. With VoIP connectivity the global reach of the enterprise takes on new importance as files can be shared, white-board sessions can be conducted all by integrating the voice and data networks. And with Ingate's Firewalls and SIParators, users can be authenticated and restricted so only relevant information is available to the partner.

The Benefits of Global VoIP Connectivity: Customers

Companies are beginning to see the value in providing customers with a more convenient way to connect to their representatives. A Click-to-Talk capability over the Internet enables a company to offer the cost savings of web-based self-service with the intimacy of a voice conversation at the click of the mouse, if it is needed. With SIP and solutions from Ingate this becomes very possible, and even the most sensitive network can remain secure and offer VoIP services to its customers.

Making the Vision a Reality

Ingate offers its SIP-aware Firewalls and the award-winning SIParators to make Global VoIP a reality. Our products include:

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:

- Monitor the SIP signaling ports
- Inspect everything received on those ports to insure that it is proper SIP signaling
- Rewrite the headers to enable the SIP signaling to reach the intended recipient on the inside of the network at their private IP address
- Dynamically open the media ports to admit voice or video on both UDP and TCP ports
- Rewrite the headers to deliver the media to the appropriate destination
- Rewrite the headers of outbound traffic to keep the private IP addresses hidden
- Close the media ports when the session is finished
- Maximum control over filtering and admittance policies.

Encryption for communication privacy

- Support encrypted SIP signaling using TLS as an added network protection feature and to keep Instant Messages private
- Support delivery of encrypted media for greater privacy
- An upcoming release will enable Ingate products to 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 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:

- STUN server on board to support STUN clients, if available
- 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.

VOIP Survival (optional 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 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.

Competitive Pricing. A pay as you grow pricing model that allows you to add users or media traversal licenses when you need them.

Ingate has proven compatibility with the Avaya SES and we are working together to bring SIP based communications to customers of all types.

IS/ITV INNOVATOR

AVAYA

DeveloperConnection
Program

inGate®

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