



SI3000 Border Gateway

Secure VoIP Communications

Why Iskratel?

- Complete solution from one vendor
- Ability to offer various flexible solutions
- Cost efficient
- Experts in migration from TDM to VoIP

Global interest in the multimedia communication services that are offered on top of the internet using connectionless protocols is growing. Signalling plays a key role when enabling these services. To implement desired multimedia services, a combination of many protocols has to be used.

Because all these protocols use IP networks as a delivery path between different users, they are sensitive to various security problems in the IP network. Challenges like how to provide integrity, authentication, authorization confidentiality and service availability are major tasks when deploying multimedia services in such an environment. In addition, the protocols used are mostly text based, which opens them to attacks from malicious users (attackers).

The other problem with implementing multimedia services is the two-stage approach in providing them:

- to enable users wanting to communicate to find each other on the global network
- to establish sessions where media (voice, video, fax, IM, presence status, etc.) is exchanged

These two stages are independent of each other. Therefore, in some scenarios, the signalling application layer cannot ensure a reliable exchange of media when FW/NAT devices exist in the communication path. These issues are resolved with the in-

roduction of new network elements – Border Controllers. New BGW elements reside on the border between networks and provide clear demarcation points between the trusted and untrusted side of the network. They implement full control over multimedia sessions.

THE ISKRATEL APPROACH

Iskratel covers a wide range of technologies, and has extensive experience in legacy TDM as well as in pure IP. As new IP based services arise, we are faced with the task of finding a way to support them in the various environments and scenarios.

As a solution to all these different needs, Iskratel SI3000 Border Gateway answers the following major demands:

- offers a complete solution from one vendor;
- implements a set of functions that completes the Iskratel product portfolio while bringing just the needed functions without the additional costs;
- allows easy and cost efficiently integration of new services to existing Telco environment;
- provides more effective management and maintenance of complex solutions, which reduces OPEX.

Customer benefits:

- Secure and reliable multimedia services
- Easier, faster and cheaper integration of entire solution
- Centralized and simple maintenance
- No hidden expenditures

Key features of the SI3000 Border Gateway:

- Topology hiding
- Far-End NAT traversal
- Call Admission Control (CAC)
- Access Lists
- DoS/DDoS prevention
- TLS/SRTP
- Transcoding

USING THE ISKRATEL SI3000 BORDER GATEWAY

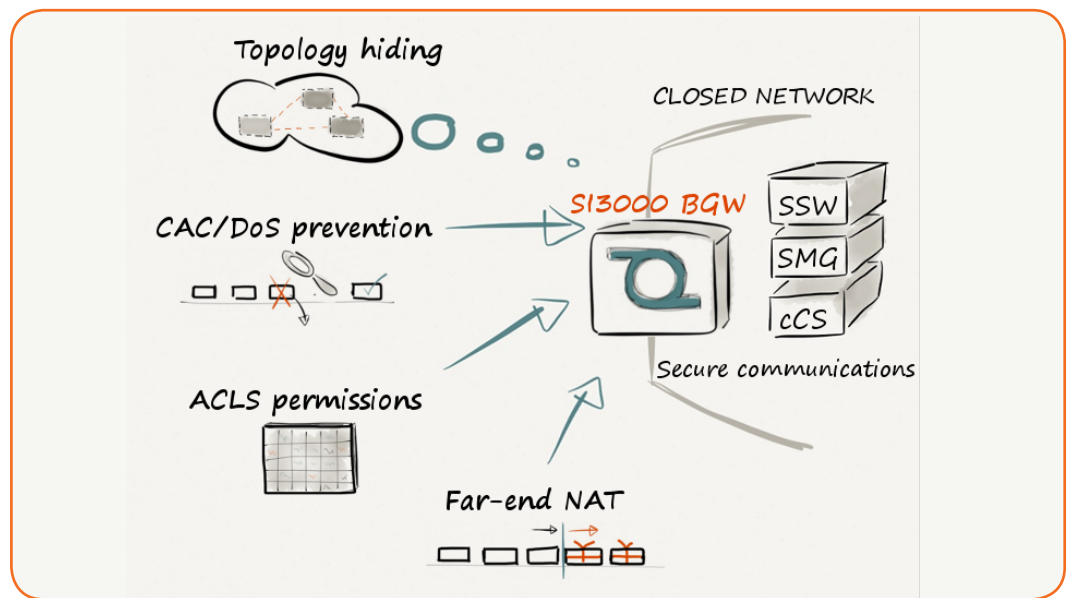
The SI3000 Border Gateway is a network device which solves the problems described above efficiently. Designed to be part of the complete Iskratel solution, it is optimized to work together with other SI3000 products, especially the SI3000 cCS and the SI3000 CS to enable deploying of secure Class5 and Corporate solutions.

The device is tailor made to fit perfectly in either a Telco or Enterprise environment, successfully overcomes security and FW/NAT traversal issues for SIP and SIP trunking services, and reduces costs for multimedia services with its support for nomadic users.

As such, it can be installed together with other Iskratel products in our standard MEA/MEB chassis, even as part of the SI3000 Lumia or independently in the 1U ETSI 19" chassis.

SI3000 BORDER GATEWAY FEATURES

- SIP B2BUA
- SIP upper-registration
- SIP trunking
- Media proxy (Voice, Video, Fax)
- Intelligent Media anchoring



- Topology hiding
- Access Lists (ACLs)
- Call Admission Control (CAC)
- Dynamic DoS/DDoS prevention
- Emergency call handling
- TLS /SRTP support
- Detecting failed routes
- Call Duration monitoring and limiting
- TCP/UDP transport interworking
- High Availability
- Web-based management
- Alarms integrated into the Iskratel Fault Management System (FMS)

The SI3000 Border Gateway acts as a border element at the edge of the service provider or at the edge of an enterprise network, and ensures secure and reliable multimedia services using the SIP protocol.

While providing the ability to build various scalable solutions with minimized investments and operational costs, the SI3000 BGW is specially designed for easy integration with existing or upcoming solutions from the Iskratel SI3000 family. The device can be managed and maintained as a part of the whole solution.

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