

SGA-RSS

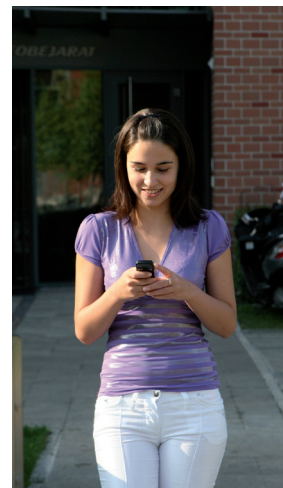
Roaming Steering Service for Ultimate Roaming Control

Stronger Signal Is Not Enough To Attract Roamers

When subscribers are arriving abroad as roamers, their handset tries to attach to the network with the strongest signal level at the place of the arrival. Operators compete for these roamers, but the winner of that competition is not necessarily the one who has the strongest signal. The roamer will attach to the network that has coverage in the area AND gets accepted by the subscriber's own HLR. Since roaming generates special revenue for the foreign network, it is worth controlling whom you, as an operator, prefer for your roaming subscribers.

A Nicer Bouncer

SGA-RSS is a standalone system installed in the signaling path between the international routes and the HLR. It acts as a bouncer in front of the HLR. In order to get the roamer attached, the VLR must ask for permission from the HLR – or, in this case, first from the SGA Roaming Steering Server, acting as a HLR for this particular dialog. The operator can define various policies and acceptance rates in SGA-RSS for each foreign network. SGA-RSS is very effective in meeting these rates as perfectly as it is statistically possible.



Clear Rules For Cruel Decisions

The operator has various options for fine-tuning the system; the main settings are the following:

- policy preferences per IMSI or IMSI-ranges
- policies on rejection per partner operator
- hard and soft limits of rejection counts per partner operator
- required statistical distribution amongst operators per country
- reject scheme per VLR
- user-defined error codes and methods for reject schemes, etc.

Based on preconfigured preferences SGA-RSS decides whether to reject the network attach request, or to pass it to the HLR, which most probably will accept it. SGA-RSS periodically provides easy-to-evaluate statistical reports for passed and rejected trials on a per-operator and per-policy basis, and generates alarms if reject counts rise or fall over pre-defined thresholds.



AITIA International, Inc.

Czetz J. utca 48-50., H-1039 Budapest, Hungary

Tel.: +36 30 748-4575, +36 1 453-8080 Fax: +36 1 453-8081

E-mail: info@aitia.ai

www.aitia.ai

SGA-RSS

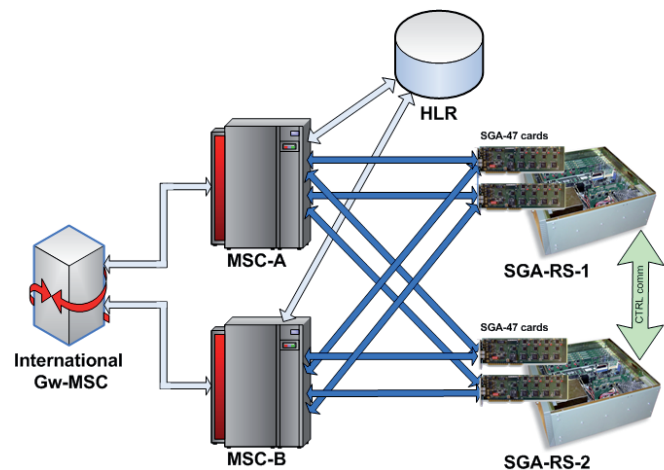
Roaming Steering Service for Ultimate Roaming Control

And They Roamed Happily Ever After ...

As a result, if the mobile phone of the subscriber is set to automatic network selection mode (which is the usual case), then it is implicitly "steered" to select a preferred mobile service provider; while in case of manual network selection, the desired network will eventually get selected, if the subscriber is patient enough.

One More Thing ...

We suggest to use a duplicated system for roaming steering. Signaling links in the international directions are vital parts of the GSM network, thus all equipment in the signal paths should be highly reliable. Each SGA-RSS machine is equipped with redundant parts, but duplication of the whole system assures the highest availability. Internal communication mechanisms in the SGA-RSS software keep the steering status databases synchronized.



AITIA Telecommunications References



AITIA International, Inc.

Czetz J. utca 48-50., H-1039 Budapest, Hungary

Tel.: +36 30 748-4575, +36 1 453-8080 Fax: +36 1 453-8081

E-mail: info@aitia.ai

www.aitia.ai