## **SMPP to SIGTRAN Gateway**

#### SMPP TO SIGTRAN

Connect SMPP Clients, ESME directly to the Mobile Networks for higher SMS delivery rate.

### SMS SECURITY

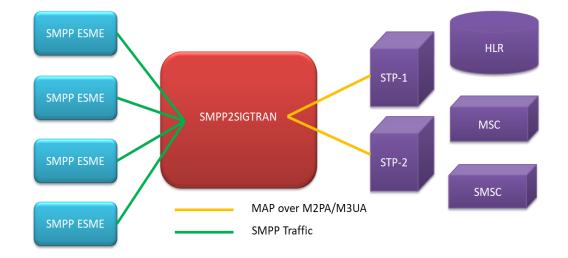
Supports TCAP Handshake, Verification of SMSC address, randomized TCAP transactions and deloayed payload processing.

### LOW CAPEX/OPEX

SMPP to SS7 installs and runs on a small to medium commercially available computers or servers. The solution can run over bare metal or virtualized servers. This ensures lower opex and capex investment and higher return on investment.

#### LINUX BASED

The solution runs over Linux operating systems in a multi-process mode for fair distribution of load across CPU cores.



- SMPP to SIGTRAN Gateway shall connect your SMPP based clients (SMPP Gateways) or ESME directly to the mobile network.
- Supports SMS Security measures like TCAP
   Handshake, verification of SMSC address,
   randomised TCAP Transactions, and support for delayed payload processing.
- Leverage the high performance SCTP transport to send bulk SMS at a very high rate
- Support for A2P or Outgoing SMS use case.
- Support for P2A or Incoming SMS use case.
- Network errors received from mobile network are passed to the bulk SMS operator, that is helpful in managing the subscriber database and cleanup of unused or invalid numbers.
- Enhanced Delivery Reporting supported with IMSI and MSC number available for accounting purposes

- Retry for SMS failed due to subscriber busy case.
- Support for email notifications for SIGTRAN and SMPP Link Down is available
- Multi-Process architecture allows better distribution of load across a multi-processor server.
- Dedicated process for handling SCTP traffic allows for very high throughput of SIGTRAN traffic.
- Capable of handling multiple simultaneous SMS towards a single subscriber
- Supports SMSC default, Latin-1, UCS-2 encoding use cases
- Supports flash SMS
- Available in two configurations, each for M2PA or M3UA based SIGTRAN transport
- Optional support for IMSI and MSC number information parameters for the incoming SMS use case



## **Operational Benefits**



The solution requires almost very low day to day operational maintenance. Once the system is configured and it is up and running, the system operator does not need to monitor it regularly. The system configuration is maintained through the configuration files.

The solution also comes with scripts to start or stop all the modules or processes of SMPP to SIGTRAN using a single command. There are Email alerts available in the solution that would help in troubleshooting in case a SIGTRAN or SMPP link goes down. In case there is a failure of any process due to any unforeseen situation, they attempt to restart themselves using the inbuilt capabilities of Linux OS.

### **RELIABLE SOLUTION**

server.

Multi-Process Architecture

enabling better utilization of CPU

cores in a multi-core computer or

Reliability of solution ensured at various levels by utilizing Linux services enabling automatic restart in a failure situation, utilizing SCTP multi-homing whenever possible.

#### **MULTI-CONNECT**

Supports connecting to many SMPP ESME at the same time and processing traffic from them in parallel.

#### ROUTING

Supports routing & distribution of incoming SMS traffic based on various criteria.

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www.shabdcom.org sales@shabdcom.org

# Capacity

SMPP to SIGTRAN has provded itself for a very high performance. It has successfully been used by a Bulk SMS operator to send a large number of SMS during the country's national elections.

In Lab environment, with a TPS of around 1000, on a system with Intel i5 8<sup>th</sup> Gen dual-core processor, the CPU utilization was stable and below 10%.

## System Requirements

SMPP to SIGTRAN can easily run from a small sized computer to a server grade computer based on the traffic processing needs of an operator.

A bare metal server or a Virtual Machine with Linux OS can be used as to install and run the SMPP to SIGTRAN solution.

### SERVICES AVAILABLE

Technical Support
Installation and Setup
Maintenance
Application Customization
New Features Development
Technical Consultancy



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