### Centralized Control

Simplify and have better control of your signaling configurations in your network.

#### Multi SIM Roaming

Convert easily between home IMSI and roaming IMSI using our E-STP solution.

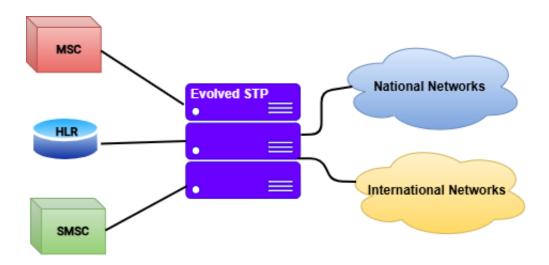
#### LOW CAPEX/OPEX

Low initial investment and very low operational maintenance needs

#### LINUX BASED

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

## **Evolved STP & Multi-IMSI Roaming Gatway**



- Modern Signaling Transfer Point node for the SIGTRAN based signaling networks.
- Support for both M3UA and M2PA
- Reduce the complexity of the network through central configurations in the E-STP
- Connect both internal and external nodes through the same E-STP
- Flexibility to assign more than one point code to connect to both national network and international networks at the same time
- Centralize the ease of management of your Global Title Translations
- Modular design ensuring carrier grade performance
- Small footprint for installation; use virtual machines or bare metal machines based on your data center setup
- Simple and intuitive to use Command Line Interface for configurations
- Notifications for Link Status and Signaling Node reachability status changes
- Capability to inspect the 3GPP MAP level attributes and replacing them as they pass through the E-STP
- Replace IMSI values, MSISDN values in the 3GPP MAP messages as they pass through the E-STP to suit your network needs
- Route messages received from international networks to national networks and vice-versa



# **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, simple and intuitive CLI commands, backup and restore utilities for the configurations. There are Email alerts available in the solution that would help in troubleshooting in case a SIGTRAN Links or destinations are unreachable. 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-TENANCY**

Supports multiple own point codes for national and international signaling connections.

#### SMALL FOOTPRINT

Run our E-STP over a virtual machine or a bare metal. Design is optimized for high performance.

For more information on any of our products or services please visit us on the Web at: www.shabdcom.org

## Capacity

E-STP solution has is a high performance solution. In Lab environment, with a TPS of around 10000, on a system with Intel i5 10<sup>th</sup> Gen dual-core processor, the CPU utilization was stable and below 10%.

# System Requirements

E-STP solution 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 E-STP solution.

#### SERVICES AVAILABLE

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



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