

NewNet - Short Message Service (SMS) Platform Solution

Overview

Lithium is an innovative, modular Short Message Service Center (SMSC), designed to overcome the obstacles of legacy SMS infrastructures. Lithium allows operators to deploy advanced messaging services to increase revenues and reduce CAPEX/OPEX. Lithium Platform also use for SMS Firewall and IP Short Message (IPSM) Gateway.

SMS Firewall - Security and Spamming

NewNet's SMS Firewall enables operators to respond immediately to new threats via the use of an innovative rule-based screening and filtering engine. The SMS Firewall supports advanced filtering and blocking to prevent unwanted SMS messages.

- Rules-based screening engine with all SMS fields as conditions with field modifications.
- SMS mobile-originated (MO) screening (SS7) identifies where spamming originates.
- SMS mobile-terminated (MT) screening (SS7) from foreign SMSCs from applications or SMSCs towards public land mobile network (mobile station).
- Anti-spoofing detection.
- Fake SMS detection.
- GT scanning detection.
- Advanced screening and detection mechanisms such as content filtering, anti-flooding and pattern detection.
- Fully configurable logging of all message details, suspect messages and blocked messages .

IPSM Gateway - Bridge Between Circuit Switched and IP Networks

NewNet's IP Short Message Gateway (IP-SM-GW) manages the origination and termination of SMS messages between circuit-switched and IP-based networks. This 3GPP-compliant software allows mobile operators to extend the life of their legacy SMS platforms by supporting IP networks without completely replacing their existing 2G/3G SMS platform. Key benefits include:

- Determines the end subscriber's network (circuit or packet), and terminates the SMS message.
- Transports IP-based messages to the appropriate SMSC or MMSC platform.
- Transports circuit-switched messages to the correct call session control function (CSCF).
- Supports SMS and MMS interworking with IP-based messaging on a single platform.
- Simplifies network migration.

SMS Benefits

- **Convert to IP** – Transition to SIP-based SMS delivery as defined in the 3GPP standard for LTE networks, without expensive network replacement
- **First Delivery Attempt** – Only stores the message if not immediately delivered, reducing store and forward load and license requirements.
- **A2P, P2A and M2M** – Scale for message surges and identify each form of traffic for QoS, billing and statistical intelligence.
- **Scalability** – Reliably deliver messages for any traffic volume, with systems delivering well over 50,000 SM/s with N+N redundancy.
- **Intelligent load balancing** – Based on dynamic and semi-static states of the platform & SMS traffic rates per second
- **Security** – Rules-based filtering and advanced anti-spoofing features virtually eliminates the delivery of unwanted messages to subscribers.
- **Real-time Reporting** – Over 300 parameters per message are available via scheduled

emails of packaged reports or within a web-based graphical user interface.

- **Flexible Billing** – Fully configurable including legacy formats and prepaid SMS billing such as CAMEL and DIAMETER.