

## Summary

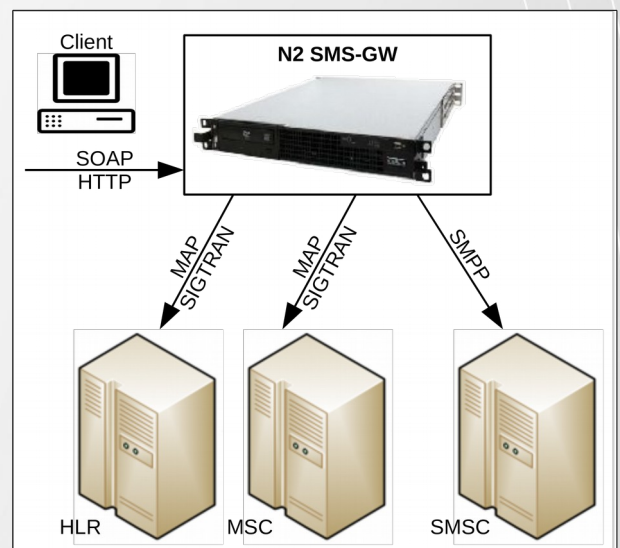
The *N-Squared SMS Gateway (N2 SMS-GW)* is an out-of-the-box appliance for efficient and convenient offload of Mobile-Terminated Short Message Notification in traditional networks. It provides a cost-effective SOAP-based mechanism for MAP First Delivery Attempt (with SMSC fallback) on behalf of third-party BSS, OSS, and VAS systems that do not themselves support the appropriate real-time network interfaces.

Deployed on Linux platforms and commodity hardware, the *N-Squared SMS Gateway* appliance combines superb modern management features with a redundant deployment model and low total cost of ownership.

## Solution Summary

The N2 SMS-GW accepts inbound requests over SOAP (XML/HTTP), RESTful API, or JSON RPC. If the Mobile Handset is on-net, then First Delivery Attempt is made via MAP over SIGTRAN. If First Delivery cannot be performed, then the request is queued at the SMSC via SMPP for later delivery<sup>1</sup>. Key features include:

- **SIGTRAN Support for SUA, M3UA**
- **MAP Support for SRI4SM, ForwardSM**
- **SMPP Support for SUBMIT\_SM**
- **Client Validation (IP Address, User/Password)**
- **Scalable/Redundant Architecture**
- **Dedicated Server or Virtual Machine**
- **Transaction Audit Logging**



## Platform Monitoring & Control

Alarms and Statistics integrate via standard system management protocols (syslog, statsd).

| N2SVCD - Status |          |  |  |  |
|-----------------|----------|--|--|--|
| #               | App Name | Resources  | Statistics   |  |
| 0               | Manage   | 1=# Active Instances<br>0=# Queued Timeouts  | 1=# Instances Started  | HTTP Host=0.0.0.0<br>HTTP Port=8088                      |
| 1               | SIGTRAN  | 1=# Connections<br>1=# Routes<br>0=# Handlers<br>0=# Active TIDs<br>0=# Posthumous TIDs<br>0=# Open Correlations | 0=# TCAP Sent<br>0=# TCAP Sent BEGIN<br>0=# TCAP Sent CONTINUE<br>0=# TCAP Sent END<br>0=# TCAP Sent ABORT<br>0=# TCAP Rcvd<br>0=# TCAP Rcvd BEGIN<br>0=# TCAP Rcvd CONTINUE<br>0=# TCAP Rcvd END<br>0=# TCAP Rcvd ABORT | Own SSN =10<br>Own Point Code =4114<br>Own Global Title= |

The built-in web-based application management interface provides integral administration features:

- View running configuration.
- View connected clients.
- View in-progress & recent transactions.
- View system statistics.

## Support & Maintenance

Initial licence includes three months of warranty and phone/email support. Subsequent ongoing support is available at 20% per annum of the base list price. A continuous support agreement includes zero-cost upgrades.

## About N-Squared

N-Squared is an Oracle Gold Partner based in New Zealand. We are specialist providers of products and services for the Telecommunications domain.

**Key Protocol Specifications**

SIGTRAN (RFC 2960, 4666, 3868)  
 MAP (G3PP 29.002 & others)  
 SMPP 3.4  
 SOAP, HTTP, JSON-RPC

Note: Protocols are supported to the extent necessary for advertised features.

**Web:** <http://www.nsquaredsoftware.com/>

**Email:** [info@nsquaredsoftware.com](mailto:info@nsquaredsoftware.com)

<sup>1</sup> The SMS-GW does not queue requests internally (it is not an SMSC).