

Short Messaging Service Center (SMSC)



4N
TeleSoft

Smart Revenue Solutions For Telecom

4N TeleSoft Short Messaging Service Center (SMSC)

4N TeleSoft SMSC serves as an inter working and relaying function of the message transfer between the Short Messaging Entities (SMEs). The SMSC uses a database that checks, accepts, buffers, processes and distributes Short Messages in a mobile network. 4N TeleSoft SMSC supports both temporary and persistent storage and can be provisioned both to forward the messages without storing in a database (instantaneous delivery) and /or with storing the messages and then forwarding (store and forward service) depending on various parameters. It automatically appends the MSISDN of the sender to the short message text to enable the recipient to identify the sender. This enables the recipient to reply back.

The SMS is sent and received over signaling path simultaneously with voice, Data and Fax calls using a traffic channel. 4N TeleSoft SMSC provides message storage, routing and confirmed delivery services between SMEs that are consistent with the short message services specified in the GSM (including GSM 900, GSM 1800, PCS 1900) Standards and IS41 Standards (including TDMA (IS-136) and CDMA (IS637) Air Interfaces)

4N TeleSoft SMSC is one of its kinds, which offer SMS over IP backbone bypassing the expensive and congested SS7 networks.

Commercial Grade Platform

4N TeleSoft is built on highly scalable Solaris and Linux carrier grade platform and has undergone rigorous trials in several live networks world over with commercial deployments

Deployable in TDMA, CDMA and GSM Networks

4N TeleSoft SMSC can be deployed in a regular GSM/IS41-C and can seamlessly work in GPRS or IS41-D/IS41-E networks.



Enhanced Feature Rich Product

4N TeleSoft SMSC is the most advanced product in the market with features like Wiretap (CALEA); IP based Prepaid Billing Interface, Mobile Number Portability (MNP).

4N TeleSoft SMSC is a ready to use product bundled with key applications such as composer, future delivery options and broadcast lists

Better Price to Performance Ratio

SMSC can be deployed in the GSM/GPRS/CDMA networks. SMSC can be designed either in clustered or non clustered mode depending on criticality and requirement of the network. This yields better price for performance ratio by reducing cost of ownership

Scalable and Cost Effective Business Models

To serve the operators thru Tier 1 tier 3 mobile operators in the market, 4N TeleSoft SMSC is designed to scale from as low as 1 SMS/sec to 1000 SMS/sec per platform with customizable business offerings.

Flexible and Easy to Use Content Providers API

4N TeleSoft provides a standard API and software development kit for third party application providers to develop enhanced SMS application content.

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The key technology components of a 4N TeleSoft SMSC

- SMSC with Store and Forward functionality
- IS41 Gateway
- GSM Gateway
- E Mail Gateway
- IP Based SMSC-SMPP/CIMD/EMI Gateway
- Broadcast Application
- Ss7 Gateway
- SIGTRAN Gateway
- SMPP Gateway

4N TeleSoft SMSC is a complete plug and play solution that can be deployed in GSM/GPRS/CDMA Networks and use the IS41 Gateway/SMPP-Gateway to inter-work with Other Operator's Networks. SMSC interacts with various SS7-Network Elements as well as IP-Based Network Elements.

One of the key aspects of deploying SMSC is interoperability with the network operator's legacy equipment, seamless convergence with existing Internet email services and unified mailboxes.

Key Features

Architectural flexibility

4N TeleSoft SMSC has the capabilities to work in non-clustered and clustered environment with variety of architectures such as SMSC with traditional SS7, SMSC supporting SIGTRAN and SS7 and SIGTRAN stack over IP.

Capacity

4N TeleSoft multi threaded software architecture supports thousands of messages per second depending upon the content personalization and user preferences.

Availability

4N TeleSoft's high availability layer with redundancy and isolated fault zones provides the much needed 5 Nines availability for the platform.

Interoperability and Integration

4N TeleSoft flexible loosely coupled architecture and standard IP based API interfaces offer smooth integration and interoperability with third party Unified Message Stores, WAP/Mobile Gateways, SMSCs, Mobile Enterprises, Billing Servers, AAAs, and User Profiles. A standard SMPP support is available for all third party applications to interface with the mobiles using 4N TeleSoft SMSC

Standard Billing and O&M Interface

4N TeleSoft SMSC provides a standard IP based billing interface for third party billing servers to collect billing records (CDRs) and produce accounting and statistical reports. A standard SNMP based interface is enabled to easily integrate the platform into the network operators O&M paradigm. Differentiated billing based on the content and unique SMPP connections are also be provided.

Prepaid Support

Prepaid billing support is provided using standard HTTP/XML interfaces which is easy to integrate. 4N TeleSoft SMSC has undergone interop tests with major Prepaid vendors.

Security and Dispatch Support

Necessary filtering and tracking is built to avoid attacks from anonymous sources. Timer based dispatch messaging is supported for time sensitive applications.

Standards Compliance

The 4N TeleSoft SMSC complies with standards such GSM MAP 09.02 Phase 2 Version 4.9.1, GSM MAP 09.02 Phase 2+ Version 7.9.0, IS41-D MAP (CDMA/TDMA), TCAP compliance to Q-773, Q-774 and Q-775 and ANSI-TCAP (For CDMA/TDMA). IETF SIGTRAN SS7 SCCP User Adaptation Layer Draft Version 14, IETF RFC 2960 (Stream Control Transmission Protocol). SMPP Version 3.4, SMPP Version 5.0, CIMD Version 5.0, EMI Version 4.5

Platform Support

The 4N TeleSoft SMSC is built on high density, highly available and scalable Sun Solaris and Intel with Linux platforms

