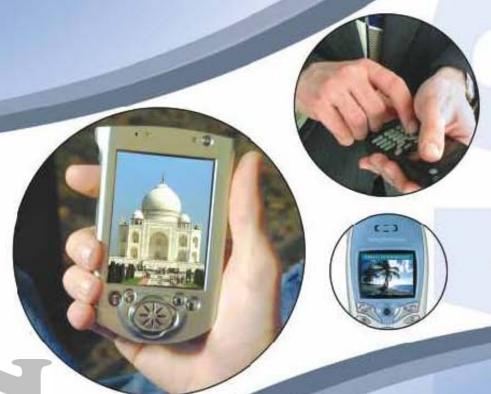
Multimedia Messaging Service Center (MMSC)



**TeleSoft** 

Smart Revenue Solutions For Telecom

## 4N TeleSoft Mobile Multimedia Messaging Service Center (SMSC)

4N TeleSoft Multimedia Messaging Service Center (MMSC) enables mobile operators to offer innovative multimedia-messaging services to it's subscribers. Similar to SMS (text messaging), MMS is proving itself to be a mass-market application for data networks. To provide SMS services, operators equip their networks with a Short Message Service Center (SMSC). Similarly, operators would have to equip their network with a MMSC to provide MMS services. A variety of MMS phones are available in the market place today and almost every new mobile phone released is going to be MMS capable phone in the future. With the prices of MMS phones going down significantly, MMS service is obviously the next revenue generating Value Added Service. Network operators can launch the MMS service either with Circuit Switched Data (CSD) capabilities or with a GPRS/CDMA2000 1X ready networks.

4N TleSoft MMSC provides the ability to exchange photos on the fly, video clips, post cards and other exciting content. Mobile Network Operators, Application Service Providers and Content Providers can use 4N TeleSoft MMSC to reach millions of mobile subscribers with exciting content and applications.

#### **Commercial Grade Platform**

4N TeleSoft MMSC is a Carrier Grade Platform which has undergone trials in several live networks and has been commercially deployed.

## Deploy able in CSD and GPRS CDMA 2000 1X Networks

4N Telesoft MMSC can be deployed in regular GSM/CDMA CSD environment and work seamlessly with GPRS or CDMA 200 1X Networks.

#### **MMS Phones Compatibility**

4N TeleSoft MMSC has been tested with all commercially available the MMS phones in the market.

#### Interoperability with other MMSCs

4N TeleSoft MMSC has been tested for interoperability with other MMSCs for providing inter-operator and roaming MMS functionalities.

## **Enhanced Feature Rich Product**

4N TeleSoft MMSC is a State-of-The art product with features like MMS Wiretap (CALEA), IP based Prepaid Interfaces, Group Aliasing and Over the air device settings support and Mobile Number Portability. It is a ready to use product bundled with key applications such as Greeting Cards Store, Photo Album, Contest White Board, and Content Managment and Delivery System.





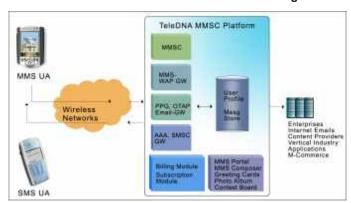
#### **Better Price to Performance Ratio**

4N TeleSoft MMSC is built on robust Intel Servers with proven Carrier Grade Linux Clustering techniques. This yields better price to performance ratio which can reduce the cost of ownership to our customers. This also yields better return on investment for our customers.

## Flexible and Easy to Use VASP API

TeleDNA provides a standard API and software development kit for third party application providers to develop enhanced MMS applications.

#### Total End to End Solution as Part of Basic Licensing Software



4N TeleSoft MMSC is an end-to-end solution that can be provided with all the necessary components features like MMS Wiretap (CALEA), IP based Prepaid MMSRelay, PPG, OTAF, Email-GW, Legacy SMSC-GW, AAA, Interfaces, Group Aliasing and Over the air device WAP2.0 Gateway and MMBox The MMSC is bundled with some key revenue generation applications like Greeting Cards Store, White Board Contests, Photo Album. Unlike other vendors who provide most of the products other than MMSRelay, we povide the complete solution at a very competitive price.

4N TeleSoft MMSC provides the necessary personalization, routing and optimization intelligence to deliver the multimedia content effectively to a variety of wireless devices.

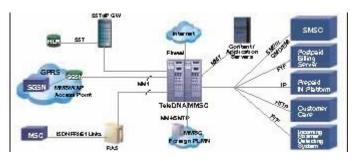
## 4N TeleSoft Mobile Multimedia Messaging Service Center (SMSC)

#### **MMSC Network Overview**

Multimedia messaging service enables wireless users to send and receive multimedia attachments. Imagine, receiving sports or news highlights to mobile phones or wireless PDAs such as iPAQ or Palm anytime and Anywhere. This new revolutionary service is changing the way people communicate and carriers are betting this to be a killer revenue generator for thoeir 2.5G/3G nerwork investments.

4N TeleSoft Multimedia Messaging platform enables wireless carriers to deploy MMS. The platform is technology independent and can be deployed for GPRS, CDMA2000 1X or, even on legacy CSD networks.

#### 4N TeleSoft MMSC Network View



#### **MMSC Network Overview**

The key aspect in deploying MMS is interoperability with The 4N TelseSoft MMSC supports network operator's legacy equipment seem less convergence with existing internet e mail and services and unified mailboxes. 4N TelseSoft's MMSRelay is a vital component, which fits into legacy messaging solutions to add multimedia aspects. The flexible software architecture based on standard IP based interfaces facilitates easy integration.

The 4N TeleSoft MMSC is a high performance, highly available, scalable and reliable server -which provides the next generation multimedia messaging services. 4N TeleSoft solution provides mobile2email, email2mobile, mobile2mobile and enterprise2mobile multimedia messaging services. The MMSC also acts as a gateway to the legacy SMSCs. The TeleDNA MMSC can be seamlessly integrated into the existing GSM-CSD, GPRS and CDMA2000 1X networks. The solution adheres to the 3GPP standards and provides a clear migration path to 3G networks.

## **Key Features Scalability**

4N TeleSoft distributed and clustered architecture is highly scalable to support from thousands to millions end users from 1 MMS per second to 200 MMS per second.

## **Hosting capabilities**

The concept of virtual operators is the latest area of opportunity generation additional revenue of the operators having hosting capabilities. 4N TeleSoft MMSC has the functionality of hosting multiple virtual operators in the same MMSC without incurring additional cost to buying MMSCs.

## **Capacity**

4N TeleSoft multi threaded software architecture can support hundreds of messages per second depending upon the content personalization and user preferences

## **Availability**

4N TeleSoft high availability layer with redundancy and isolated fault zones can provide the much needed 5 Nines availability for the platform. The software layer also supports minimum downtime software upgrade strategies.

## **Seamless Integration**

4N TeleSoft flexible loosely coupled architecture and standard IP based API interfaces aid in smooth integration and interoperability with third party Unified Message Stores, WAP/Mobile Gateways, SMSCs, Mobile Enterprises, Billing Servers, AAAs, and User Profiles. The 4N TeleSoft MMSC has been tested with all commercially available MMS phones in the market place.

## **Legacy SMS Phones Support for MMS**

The 4N TeleSoft MMSC supports legacy SMS users to send MMS messages and receive notifications for their MMS Messages. Upon receiving the notification an SMS user can retrieve and view the MMS content using a network message mailbox

## **Intelligent Routing**

4N TeleSoft Intelligent Routing module ensures a convergence point between wired and wireless Internet addressing. The module makes intelligent decisions on its own based on the user preferences to route the message in an optimized and efficient way.

#### **Personalization Intelligence**

4N TeleSoft personalization module provides high performance multimedia scaling, formatting, and conversions of media to provide transparent access to any device.

#### **Optimization Intelligence**

4N TeleSoft optimization intelligence provides an efficient and optimized means of downloading the media to a variety of mobile devices. Smart download resume and recovery aspects are built into this module

## 4N TeleSoft Mobile Multimedia Messaging Service Center (SMSC)

## Standard Billing and O&M Interface

4N TeleSoft MMSRelay provides a standard IP based billing interface for third party billing servers to collect billing records (CDRs) and produce accounting and statistical reports customizable to your requirement. A standard SNMP based interface is enabled to easily integrate the platform into the network operators O&M

### **Prepaid Support**

Prepaid billing support is provided using standard interfaces like HTTP/XML connecting to several standard prepaid vendor platforms.

## **Security and Dispatch Support**

Necessary filtering and tracking is supported to avoid attacks from anonymous sources. The data here is used to aid sender-billing concepts. Timer based dispatch messaging support is also provided for time sensitive applications.

### **User Profile and Message Store**

4N TeleSoft User Profile and Message Store components are high capacity, highly scalable servers supporting standard protocol interfaces like IMAP, HTTP, LDAP and POP.

#### **Standards Compliance**

The 4N TeleSoft MMSC complies with standards such as MAP, IS-41, 3GPP, WAP2.0 and SIGTRAN.

### **Platform Support**

The 4N TeleSoft MMSC is built on high density, highly available and highly scalable Linux Clusters with Intel Based Servers.

# Reverse Billing and Application Service Provider (ASP) Support

The 4N TeleSoft MMSC supports the concepts of reverse billing which is useful in offering this service by an independent Application Service Provider (ASP). Carriers can use an independent ASP's MMSC to provide MMS service to their customers.

## **Standard Functional Features Support**

The 4N TeleSoft MMSC supports all the 3GPP standards based features like Network based MMBox Storage Management, Reply Charging, Push Features, Pull Features, VAS interface support, inter-relay interface support, message forwarding, MMS support for legacy phones, SMPP based interface, Push Access Protocol (PAP) Interface and Greeting Store, Personal Albums and Contest White Board MMS applications.

For more enquires please send a mail to info@4ntelesoft.in

