



## Key Benefits

- Mobile-terminated and mobile-originated service support
- Client/server architecture
- Self-optimizing and dynamic databases for
  - Short message
  - Archive
  - Subscriber
  - Configuration
- Predefined messages
- Deferred, priority, and acknowledged delivery
- Fixed interval and error-based message redelivery
- Message delivery to clients
- Call barring (IMSI and MSISDN)
- Classes of service with per-service billing support
- Closed user groups
- CALEA AF support (Lawful Intercept AF support)
- WAP support
- Message intercept capability
- Password authentication
- Wireless Number Portability support
- Multiple time zone support
- SNMP support
- Ring tone, picture and melody download support
- Traffic administration with programmable intervals
- Statistics on messages subscribers and services
- Complete graphical operation
- Telcordia Z.100 compliant man machine language support
- Process and fault management with continuous monitoring and automatic recovery
- Customizable alarm management
- Quality of service management per client
- Simultaneous support of multiple network access protocols (TDMA, CDMA, GSM, iDEN) as a gateway
- MMS message notification support
- High Availability Configuration

## SMserver Summary

### Proven Solution

The NewNet SMserver is a robust, flexible, open architecture short messaging platform ready to deploy with value-added short messaging services.

The SMserver manages the transmission of alphanumeric messages and binary data between mobile subscribers and external systems such as paging, electronic mail and voicemail systems. Built around client/server architecture, it supports connectivity to external systems via dedicated client modules. It accepts, stores, and manages alphanumeric messages to be delivered to mobile subscribers. In addition, it supports binary data delivery which is required for services like ring tone download, picture download and Multimedia Messaging Services (MMS).

The SMserver manages all network interactions and provides sophisticated redelivery mechanisms to ensure reliable and prompt delivery of short messages. It supports performance monitoring and full billing capabilities. The open Short Message Client and Short Message Peer-to-Peer Interface facilitate timely deployment of value-added services.

### Value Leadership

**Cost-effective.** The SMserver is designed to grow as the network grows. Its modular architecture and performance scalability offer the greatest level of flexibility in purchasing performance increments and additional services making it possible to support small networks as well as large. The SMserver can be deployed in both Simplex or Clustered configurations supporting 1000's of messages per second throughput

**Powerful.** Reliable and Scalable. The SMserver combines the memory and processor scalability of today's UNIX platforms with object-oriented, kernel-resident design and development techniques to achieve high-performance, reliability and scalability. The software can be scaled to support millions of subscribers.

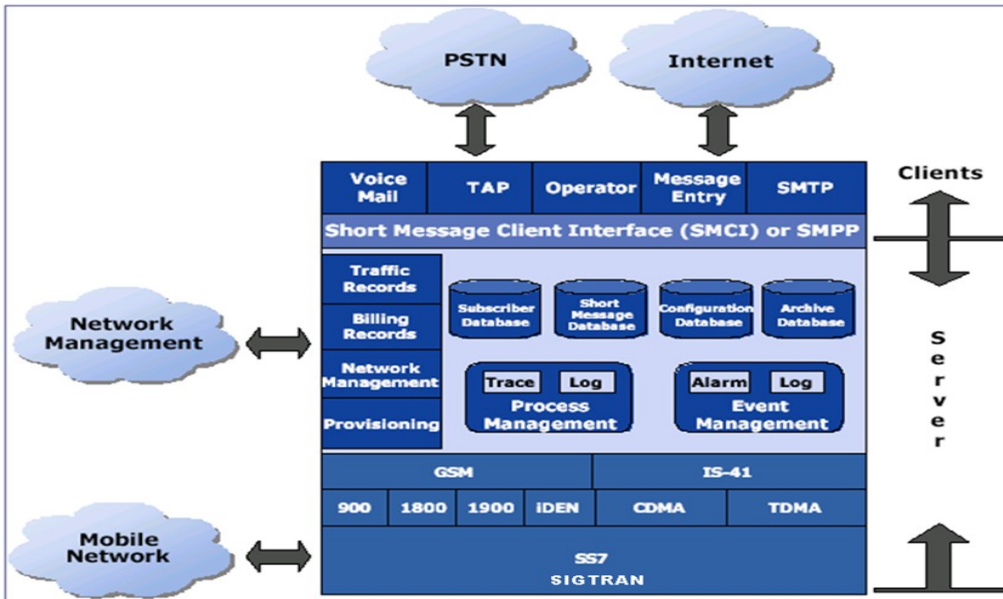
**Easy to Use and Easy to Maintain.** With features like graphical user interfaces, self-optimizing database engine, operational measurements, and billing record generation, the SMserver minimizes the administrative and maintenance chores in day-to-day operation.

**Revenue-Generating Services.** The SMserver enables mobile operators to generate new revenue streams by deploying applications such as person-to-person messaging (including mobile-originated messaging), voicemail

### Application Client Support

- **Voicemail Interface** allows voicemail system to send voice mail notification messages
- **X-Windows Operator Client** provides an interface for LAN/WAN- based service bureau applications
- **Java Operator Client** provides a message entry interface for web-based service bureau applications
- **Batch Client** provides a distribution list capability
- **SMTP E-mail Client** provides Simple Mail Transfer Protocol interworking
- **Tap Client** provides Telocator Alphanumeric Protocol interworking with extended capabilities.
- **Web User Client** provides a message entry interface from an Internet website
- **Group List Client** provides a capability for the subscribers to manage personal distribution lists
- **Schedule Client** provides a capability for the subscribers to manage their calendars

## Architecture Diagram



## Open Programming Interface

### Short Message Client Interface (SMCI)

SMCI is a specialized messaging interface designed to enable the development of short message client applications over TCP/IP. SMCI procedures are implemented in a Client Gateway that provides brokerage services for the short-messaging clients.

### Short Message Peer-to-Peer Interface (SMPP)

Industry standard SMPP protocol, used for general purpose messaging applications, is part of the SMserver and is the primary interface used for external client applications like voicemail notification.

## Standards Compliance

The NewNet SMserver supports all required parameters, operations and procedures for operation in GSM networks including GSM 900, 1800, 1900 and iDEN, as well as IS-41 networks including IS-136 TDMA and IS-637 CDMA.

## Technical Operation Environment

Model	CPU	Bus	O/S	MPS
Netra T2000 – 2U	UltraS-PARC	PCI/PCIe	Solaris 10	300
Netra T5220 – 2U	UltraS-PARC	PCI/PCIe	Solaris 10	300
Netra T5440 – 2U	UltraS-PARC	PCI/PCIe	Solaris 10	300
<a href="#">Netra x4250 – 2U</a>	X86	PCIe	Solaris 10	600

## About NewNet Communication Technologies

NewNet Communication Technologies is a recognized leader in signaling and messaging solutions for wireless, IP, and wireline networks. The robust, scalable signaling platforms have enabled rapid development and deployment of a wide spectrum of carrier grade, revenue generating and compliance applications. NewNet is a pioneer in the development of standards based SS7 signaling solutions and is committed to providing unparalleled service and value to our customers. For nearly two decades, NewNet has been synonymous with messaging excellence and is the trusted name in SS7 and SIGTRAN signaling solutions.

*For more information on our products and services, visit our website at: [www.newnet.com](http://www.newnet.com)*

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**NewNet** Communication Technologies

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