Key Benefits

- **Reliable** - Distributed architecture, eliminating single point of failure and message loss

- **Cost-efficient** - Operates on industry-standard, NEBS-compliant servers taking advantage of the price, performance, and reliability improvements in the underlying hardware platform

- **Concurrent SS7 and IP Signaling Support** - Simultaneously allows both conventional SS7 and SS7-over-IP connectivity transparently to users

- **Global Connectivity -** Based on proven NewNet SS7 technology, deployed in over 60 countries

  - ANSI, ITU, China, and country-variant support of the MTP user parts (e.g., ISUP, SCCP, and TCAP)

- **Open, Standards-based Implementation**

  - Supports SIGTRAN and SS7 protocols

  - Standards-based network system configuration with man machine language (MML) and simple network management protocol (SNMP)

- **Faster Time-to-Market** – Enables faster development and deployment of intelligent network service and call control applications using standard SS7 (ISUP, SCCP, TCAP) APIs in the IP domain

  - Compatible with existing NewNet SS7 libraries, which minimizes development time

  - Sample application code for faster startup of development cycle

SIGTRAN Gateway Client Summary

Proven Solution for Next Generation Applications

The Signaling Gateway Client from NewNet Communication Technologies is a next-generation application development node that integrates Signaling System # 7 (SS7) and SIGTRAN services. It provides seamless connectivity to both the public switch telephone network (PSTN) and IP networks. Built on the powerful Distributed7 SS7 stack, the Distributed7 Signaling Gateway Client provides comprehensive and cost-effective SS7 and SIGTRAN services for the application developers of SS7 user parts. The Distributed7 Signaling Gateway Client offers a development environment and tools for developing applications in a transport-independent environment for next generation networks.

Value Leadership; High Performance, Scalable Platform

The Distributed7 Signaling Gateway Client complements standards-based signaling gateways by providing an SS7-IP interworking solution. It communicates with the signaling gateways using SIGTRAN protocols [Stream Control Transmission Protocol (SCTP) and the MTP3 user adaptation layer (M3UA)]. With the Distributed7 Signaling Gateway Client, user applications in the IP domain are able to use the SS7 services without having to focus on the details of protocol conversion.
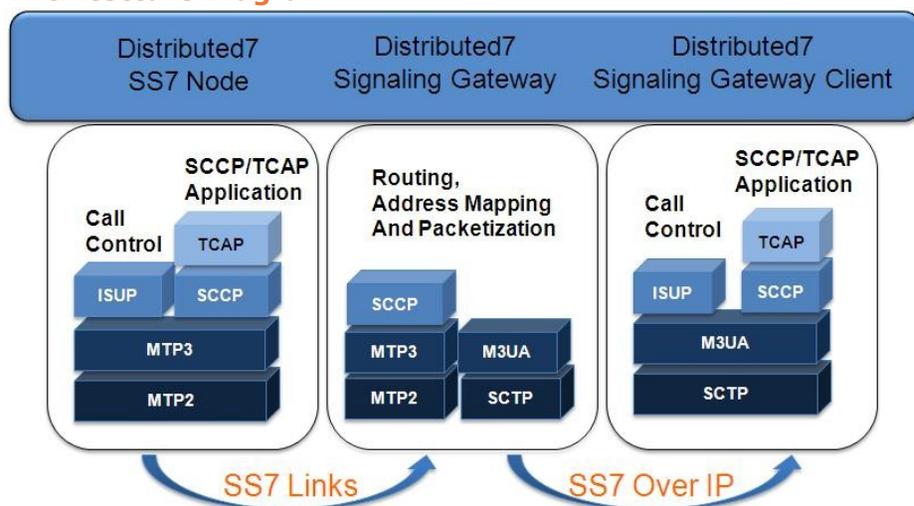
High Availability, Distributed Functionality

The Distributed7 Signaling Gateway Client provides SS7 user part services such as signaling connection control part (SCCP), transaction capabilities application part (TCAP) and ISDN user part (lSUP) to IP-based applications such as media gateway controllers (MGCs), IP-SCPs, or IP-based home location registers (HLRs). These applications can run on the same host as the Distributed7 Signaling Gateway Client, on a different host, or they can be distributed across several hosts in a cluster.

Technical Specifications

FEATURES	DESCRIPTION
SIGTRAN Stack	RFC 3332/4666 complaint M3UA RFC 2960 complaint SCTP
SS7 Stack	ANSI (1992, 1996), ITU (1993,1997) complaint SCCP, TCAP, ISUP
System Administration and Network Configuration Interface	Standards-based MML and SNMP
SS7 API	C/C++ API for SCCP, TCAP, and ISUP, JAIN API for TCAP/ISUP
Systems Availability	99.999% availability in distributed configuration
IP to SS7 routing mechanisms	Routing keys based on DPC, OPC, SIO, and CIC
Security	IPsec

Architecture Diagram

Capacity Specifications

Hosts supported in Cluster	8
Signaling Gateways	16
ISUP Circuits	262,144
Transaction IDs	262,144
SCCP Subsystems	256
Global Title Types	16
Translation types per Global Title types	256
User application Registrations	64
Signaling Points	8

Technical Operation Environment

Processor	Ultra SPARC II/III, x86
Bus	PCI, PCIe
OS	32bit/64 bit Solaris 9/10 RedHat Enterprise Linux R4,R5
IP Interface	10/100/1000BaseT Ethernet

NewNet Communication Technologies

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