

Changing the Way the World Communicates

## SoIP Sigtran Gateway - SS7 to IP for Legacy Mobile Networks

#### Compact, High Performance and Cost Effective Sigtran to SS7 Gateway

# Ideal for linking GSM network elements and for adding IP connectivity to legacy switches

The SoIP Sigtran Gateway is a Signalling Gateway translating SS7 MAP signalling to Sigtran M3UA. This is normally used to connect IP-based equipment to an operator's existing SS7 network. Typical examples of IP-based equipment are SMS Message Hubs, HLRs and Call Centre equipment the SoIP will allow these to interwork fully with the installed base of equipment in the mobile network and therefore save investment by extending its useful life

The SoIP solution complements SIP-based NGN solutions and seamlessly integrates with traditional SS7 networks.

#### WTL Carrier Grade Solutions

The SoIP Sigtran Gateway is based on the well-established SoIP SS7 Gateway which has been widely deployed in hundreds of carrier networks all over the world. WTL's huge expertise in SS7 signalling has been used to add SCCP signalling to the existing ISUP stack.

The WTL SoIP implements GTT (Global Title Translation) and therefore is a fully featured Sigtran and SS7 switch. This means that multiple connections may be supported on both the IP and the TDM sides. Switching between connections is managed by reference to GTT routing tables.

The product is highly scalable and the TDM connections may be E1/T1 or STM-1.

#### **Product Benefits**

- Ease of Use Simple web-based set up and management
- Performance Supports more than 1000 MSU per second
- Reliability Multiple physical and logical redundancy features
- Scalable Starts as small as 2 E1s and can expand all the way to multiple STM-1s
- Total Routing Freedom Sigtran to SS7, Sigtran to Sigtran, SS7 to SS7
- Protocols –Sigtran M3UA, SS7 ISUP
- Flexible Up to 64 Sigtran connections per gateway
- Multi-use SoIP Sigtran can also act as VoIP SIP gateway

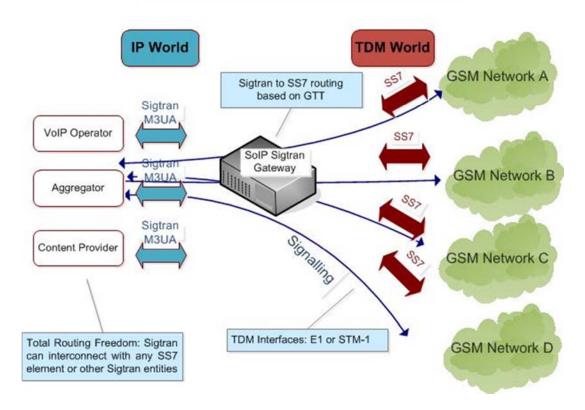
## **Total Routing Freedom**

The product acts as both a SG (Signalling Gateway) and a STP / ITP (Signalling Transfer Point / IP Transfer Point) and allows flexible topologies. This means that IP to IP or TDM to TDM routing is possible at the same time as the classic IP to TDM.



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### SoIP Sigtran Gateway



# **Key Features:**

The basic SoIP Sigtran Gateway is a 4U rack mounted device with 2 to 32 E1 links. Multiple gateways can be seamlessly linked and larger versions of the product support capacities up to 8 x STM-1. One box can support SS7 signalling translation for up to 256 SS7 Signalling Link Sets. The SoIP uses the Solaris Operating System, RAID disks and dual PSUs to ensure the highest levels of reliability. SoIP supports many SS7 ISUP variants and network topologies. Multiple routing rules can be configured to support various fallback features.

#### Great Flexibility

- SS7 ISUP message manipulation
- Modify information elements in SS7 messages
- SS7 Cause Code mapping
- Number manipulation for incoming (pre-routing) and outgoing (post-routing) trunks



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#### Carrier Grade Platform

High availability architecture - 99.99% availability

SS7 Redundancy at multiple levels

• Total Remote Management

Web based EMS

• IP separation (per media, control protocol, and OAM)

## **Specifications**

G a t e w a y: M3UA Signaling Gateway M3UA Virtual STP Gateway

MTP & SCCP layers TDM signaling links

STP Features: SCCP Relay M3UA Geographic redundancy

Point Code Translation Capability Point Code

Point Code Emulation

Routing on SCCP called party address

Routing on ASPid Round Robin Load Balancing

Routing on Transaction Id for WTL internal client

Capacity: Up to 32 SS7 links\* Up to 32 SS7 trunks\*

64 Destination Point Codes

international)

4 Operational Point Codes (National or

Call set up: BHCC Rate (Busy Hour Call Completion) < 250,000 per SoIP

Gateway

\* Limit per unit. Expansion possible via additional units.

Physical: SS7 Interfaces: T1/E1/STM-1 IP Interfaces: 2 x 10/100/1000 Base-T Ethernet

3 x SCSI RAID 5 + Pass through disk for emergency recovery

Power: 1+1 redundant PSUs. Consumption: Max 800W

Height: 4U Depth: 755 mm