



TNS FACILITATES SS7 LINK REPLACEMENT WITH INFRASTRUCTURE AS A SERVICE (IAAS)

TNS is a leading global provider of Infrastructure-as-a-Service (IaaS) solutions to thousands of organizations across more than 60 countries in the communications, payments, and financial markets.

The company developed a new infrastructure offering that enabled carriers to switch from SS7 to SIGTRAN or SIP IP, eliminating TDM circuits.

TelcoBridges' Tsig™ solution successfully provided protocol conversion between TNS' SIGTRAN network and the existing TDM SS7 circuits.

BACKGROUND

TNS is a leading global provider of Infrastructure-as-a-Service (IaaS) solutions to thousands of organizations across more than 60 countries in the communications, payments, and financial markets. TNS' IaaS solutions are designed to support the demanding needs of carriers.

For instance, they feature call analytics, which identify unwanted robocalls and enable enhanced mobile identity for legitimate callers, as well as provide support for interoperability, clearing, settlement, and analytics for LTE and 5G.

CHALLENGES

To extend its product portfolio, TNS launched a new Infrastructure as a Service (IaaS) service, enabling carriers to replace their existing SS7 signaling circuits with SIGTRAN or SIP IP services. SIP protocol could, in turn, enable the implementation of STIR/SHAKEN, a recently developed digital authentication standard designed to reduce the occurrence of robocall spoofing. The solution also supported the conversion of Integrated Services Digital Network User Part (ISUP) to Session Initiation Protocol (SIP).

“Many service providers across the US and Canada depend on expensive legacy SS7 links to relay signaling information to/from their interconnect operator peers”, said Anna Sopotseva, Marketing Director at TelcoBridges. “By migrating from SS7 to less costly and more flexible IP-based SIGTRAN, service providers can reduce their operating costs and accelerate their migration to SIP services and STIR/SHAKEN compliance.”

In a nutshell, this new IaaS offering allows carriers to modernize their networks, eliminate expensive leased-line TDM circuits, and utilize more flexible IP-based circuit paths.

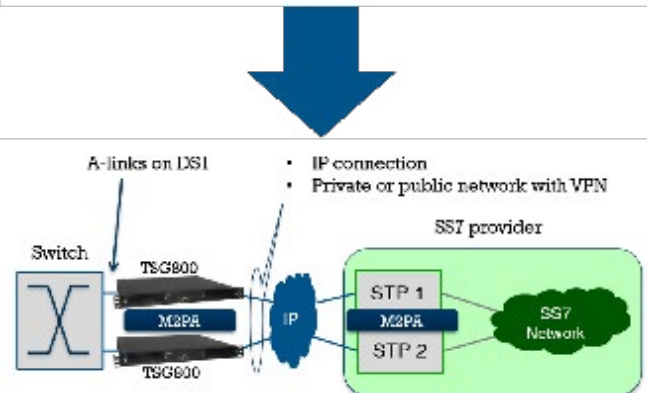
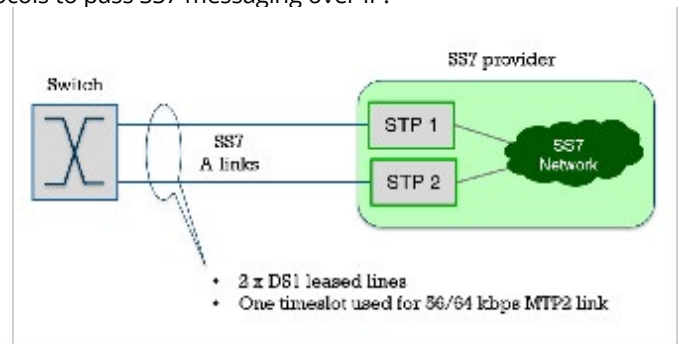
However, to implement replacement, TNS needed a trustworthy supplier of key connectivity components with facilitating interconnection between the company's SIGTRAN services and their customers' legacy SS7 equipment.

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SOLUTION

In this application, the typical deployment uses a pair of redundant TelcoBridges Tsig signaling gateways that provide protocol conversion between TNS' SIGTRAN network and the existing TDM SS7 circuits on a customer's switching equipment. SS7 is a common-channel signaling protocol typically found in carrier-to-carrier applications, passing signaling information for call establishment and termination. SIGTRAN is an IETF Signaling Transport (SIGTRAN) group defined by a collection of transport-layer protocols to pass SS7 messaging over IP.

TelcoBridges Tsig signaling gateways convert between SS7 and SIGTRAN telecommunications signaling protocols. TelcoBridges Tsig scales from a 1x SS7 signaling link to 64x SS7 signaling links in a single 1U chassis with either -48V or universal AC power supplies. They are offered in optional fully redundant (1+1) configurations, providing high availability (HA) of more than 99.999% availability. Visit [TelcoBridges Solution Brief](#) for a more detailed explanation: telcobridges.com/solutions/solutions-for-signaling/migrating-to-sigtran/



RESULTS

TelcoBridges Tsig plays an important role in new TDM Link Replacement service, facilitating interconnection between TNS SIGTRAN services and their customers' legacy SS7 equipment. With this new service, TNS and its IaaS offering can help modernize service provider networks and eliminate the rising cost of TDM SS7 interconnect circuits.