

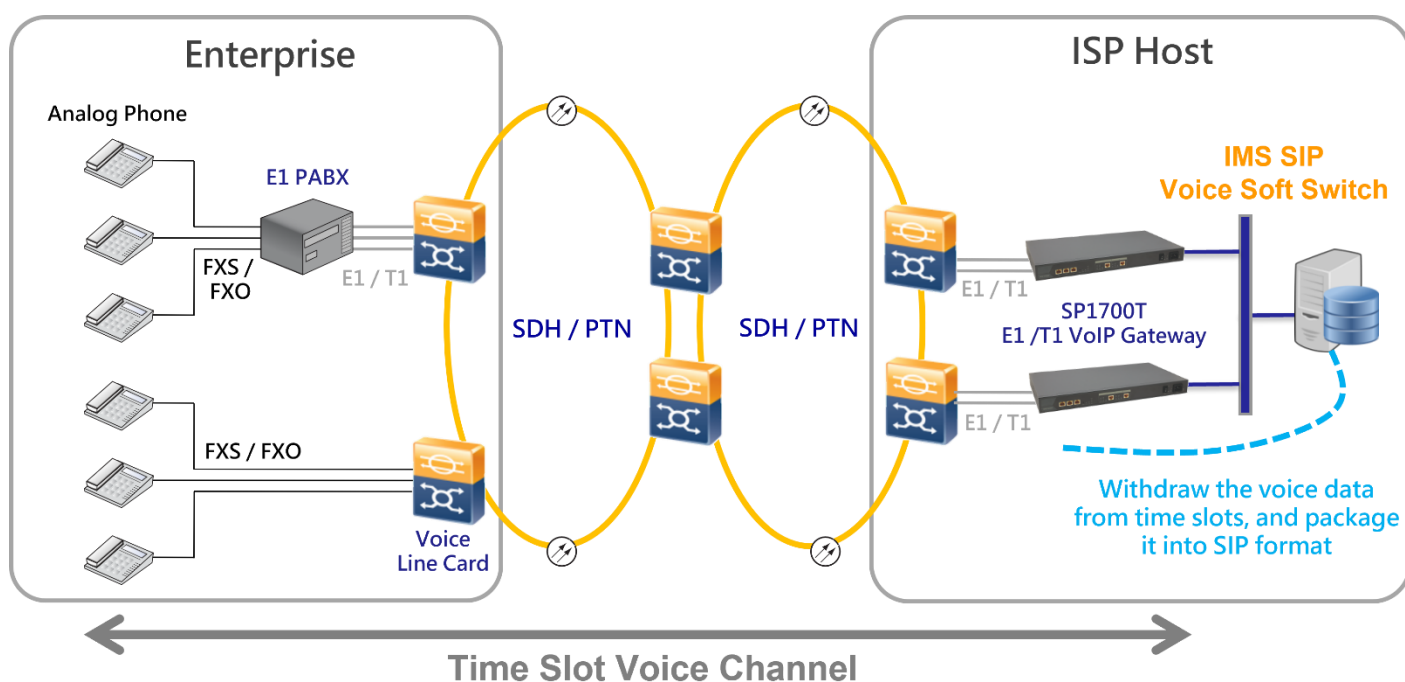
# E1/ T1 Trunking Gateway

What can Soft switch do for business



## TDM to VoIP, softswitch solution for business

In today's critical industries such as water, electricity, gas, mining, aviation, transportation, and public security, despite the adoption of many new data/IP networks, "hard channels" still play a crucial role in voice communication. These are dedicated voice connections built on time-division multiplexing (TDM). Hard channels can provide very stable voice transmission quality during disasters or emergencies. Although the equipment is traditional, it is still widely used in scenarios with extremely high reliability requirements.



To adapt to the trends of networking and IP-based communication, TAINET has developed an E1/ T1 ISDN Trunking Gateway that can operate in SDH/ PTN bearer network environments. This gateway extracts voice streams, encapsulates them in SIP format, and registers the voice data with IMS (IP Multimedia Subsystem) voice softswitch systems or enterprise IPPBX voice softswitch systems.

## From Traditional TDM to SIP/IP Bridging

TAINET E1 Communication Application bridges the gap between E1/ T1 time-slot network application and voice softswitch, allowing systems that previously relied on TDM hard-channel connections to be converted to the SIP protocol via the gateway and connected to IP voice switching platforms. This is a feasible and effective application for many enterprises that still retain E1/ T1 equipment, wish to upgrade their voice networks, or are gradually transitioning to both bearer networks and voice communication.

Encapsulating voice streams in SIP format and registering them with the IMS architecture not only enables VoIP voice but also provides various communication application solutions for subsequent multimedia, unified communications, mobile-fixed network integration, and cloud communications.

## Wide Range of Applications for Core Features

TAINET E1/ T1 ISDN Trunking Gateway is suitable not only for telecom operators and enterprise IPPBX deployments, but also for diverse applications such as Smart City, SIP Communications, Public utility Service, Fiber and Last Mile. It's not limited to a single voice switching scenario, but rather addresses the overall needs of voice bearer network transformation.

TAINET E1/ T1 ISDN Trunking Gateway can replace the traditional TDM time-slot transmission methods such as ISDN and SDH, switching data packets via the most popular Ethernet network today. It supports up to 60 voice conversions, SNMP, HTTP, and a user-friendly web UI configuration page. It can also be integrated with an Auto Provision Server to configure server network management systems. It is widely applicable to traditional enterprise E1 PBXs (voice switches) and carrier IMS (IP Multimedia Subsystem) voice multimedia switching systems, constructing an integrated voice IP-based solution.

