**SIP Trunks: A Telephony Solution to Leverage High Internet Bandwidth of Manufacturing Companies**

**Summary:** Manufacturing companies that use high-bandwidth Internet across their work centres need not always invest in traditional phone hardware to set up the business telecommunication systems. SIP technology gives them the ability to use the available data connectivity for cost-effective voice applications.

With the adoption of digitalisation for more and more of their routine processes, manufacturing companies usually subscribe to high-bandwidth Internet connections. They need this to fuel smart manufacturing, automation, lean production and mass customisation of products.

By deploying smart digital technologies, manufacturers aim to improve productivity, eliminate inefficiencies and reduce their time-to-market.

The robust and secure Internet connectivity that is used for such applications can also help these organisations to establish seamless virtual collaboration tools.

Session Initiation Protocol (SIP) is an effective signalling protocol that allows businesses to make and receive calls through IP-based phone lines. The digital SIP Trunk can be plugged into an Internet Protocol private branch exchange (IPBX) to initiate communication processes.

Technically, SIP defines the messages transferred between endpoints. It manages the establishment, termination and other essential elements of a call. It may also be used to transmit data between two or multiple endpoints.

For manufacturing companies that have surplus Internet bandwidth, the key benefits of using SIP for communication are:

**Flexibility and scalability**

As a voice calls technology, SIP is more flexible than the Primary Rate Interface (PRI) lines. With a single link, users can make and/or receive 30 to 1500 simultaneous calls.

When the communication needs of a manufacturing organisation grow, it can easily add more trunks and expand the system to new locations while retaining the original phone numbers. With SIP Trunks, a company can increase (or decrease) its call capacity in multiples of 10 channels easily, quickly and as per the existing business demand.

This agility is an advantage for manufacturing units that have teams at multiple locations and must ensure seamless collaboration between factory sites, research labs, sales offices and other stakeholders. SIP also offers voice communication support for all remote workers.

**Disaster recovery and business continuity**

SIP offers exceptional resiliency in the event of disasters. It can be a valuable component in a manufacturing organisation’s disaster recovery and business continuity planning. The key attribute that makes SIP Trunks useful in addressing business disruption is the absence of physical circuits. There are no single points of failures in the forms of cables that can be severed.

SIP Trunks are configured to facilitate the receipt of incoming calls to specific Direct Inward Dialling (DID) telephone numbers. Manufacturing companies can set up their own call routing rules to maintain the flow of communication at all times. Unanswered phone calls can go to voice mails. They can also be routed to mobile phones if the Internet connectivity serving an office is suddenly disrupted.

Direct outward dialling facility is another benefit of telecommunication with SIP Trunks.
Low-cost solution

SIP service is offered on a per-channel basis according to demand. In other words, a business has to pay only for the capacity it uses for phone calls.

There are no charges for calls internally made in the company subscribing to the service. Furthermore, the digital ecosystem and technical simplicity of SIP significantly reduce or eliminate the costs of hardware, installation, configuration, maintenance and upscaling. With such benefits, SIP is generally 30% to 40% cheaper than PRI lines.

By allowing sophisticated multichannel communication through voice and data, simplifying scalability and affording enterprise cost savings, SIP also improves employee productivity and customer experience.

Business success story

Tata Tele Business Services delivers tailored digital solution across industries. Our SIP Trunks are adopted by a number of manufacturing organisations that aim to improve the quality of their voice communication while keeping the underlying infrastructure flexible for expansion.

The Challenge

One of our clients owns a small call centre setup to generate leads for their ‘company owned company operated’ (COCO) stores. The implementation of the country-wide lockdown during the coronavirus outbreak resulted in a significant drop in their sales, and they had to arrange for direct home deliveries to serve the leads generated.

Another challenge in this case was to maintain the continuity of call centre operations without asking the agents to visit the office. They needed a solution that would allow their employees to work from home and generate leads securely through calls.

The Solution

Our PBX-hosted SIP solution became a supportive communication platform for this manufacturing company. We enabled the agents to log on to their call centre software using their own phones. They could then connect with customers as per the data uploaded by the supervisor and generate leads while working from home.

This Smart Hosted PBX service came with a DIY portal that allowed supervisors to monitor the number of calls being made and the number of customers that agents could successfully connect to. They could also record the calls for quality analysis and data protection as parts of their key performance indicators (KPIs) in normal call centre operations.

The Benefits

At a time when it was essential to maintain business continuity without endangering lives, our PBX-based SIP solution could be deployed with zero CapEx. The client could give its employees the ability to call from home without any need for investing in infrastructure.

The digital solution also made scalability easier and economical. The company could easily expand its business and increase the agent count even for short-term campaigns. Our client now has an agile and future-ready platform to keep running its operations while allowing the staff to work from remote locations whenever required.

For the companies that already have PRI lines and wish to combine the benefits of SIP with the superior call quality provided by their traditional (PRI) setup, Tata Tele Business Services can integrate the two for a versatile hybrid phone and networking system. Our SIP Trunk solutions also accommodate vendor diversity if you have subscribed to Internet data connectivity from multiple service providers. We provide 140 unique phone numbers with every SIP connection.
To know more about this digital telephony service, do not hesitate to call us at 1800-266-1800.