

How does the Sunrise SIP trunk differ from other ITSPs' (Internet Telephony Service Provider) SIP trunks?

A SIP trunk requires IP connectivity, either over the Internet or in a closed private network of the customer's SIP-capable phone system (PBX) to the public phone network.

The Sunrise VoIP SIP trunk is based on the principle of the dedicated point-to-point interconnection over the Sunrise backbone to the customer's phone system. As a result, Sunrise can provide E2E voice transmission quality and security, since the entire SIP trunk infrastructure is based on its own MPLS network. This is not the case with connectivity over the Internet. Particularly in cases where Internet and voice services are not offered by the same service provider, consistent voice transmission quality and availability cannot be guaranteed.

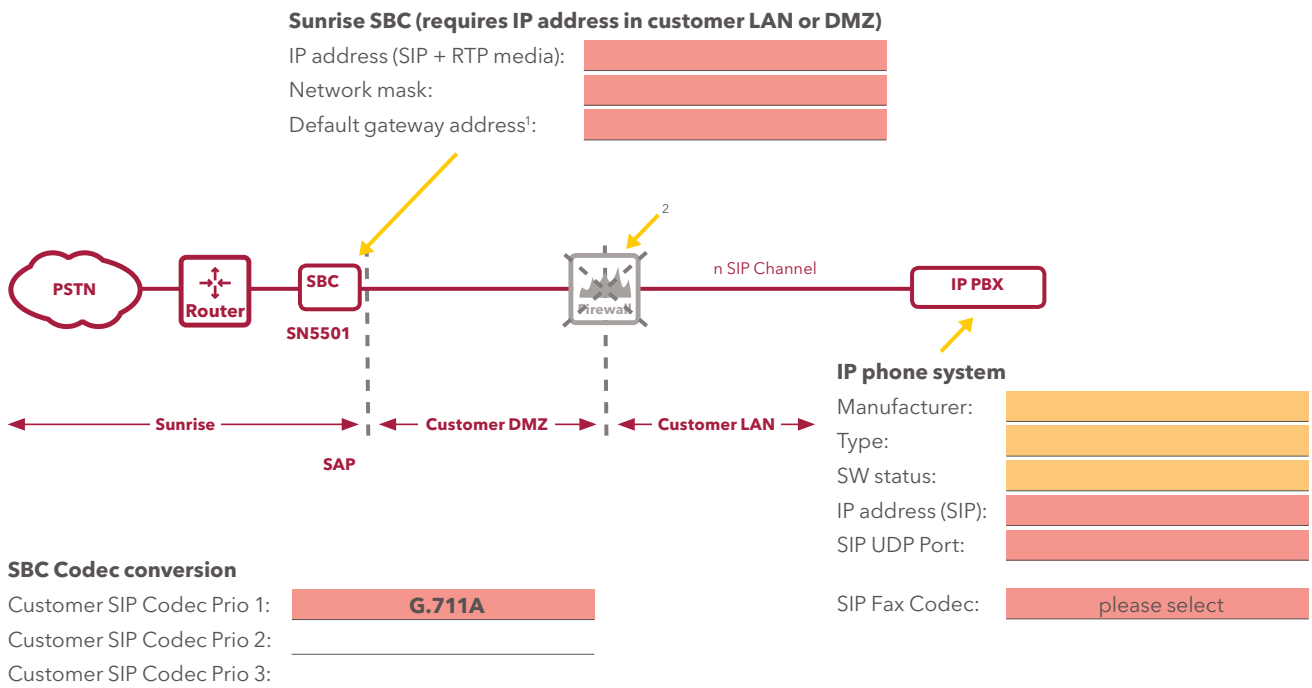
For companies to appear professional, however, voice services have to be at the highest level of quality at all times.

The main advantage of MPLS is ability to prioritize data into categories, such as data, voice or even video. MPLS ensures that all data packages of a certain category take the same route and are therefore transmitted at consistent speeds. In addition, with an MPLS Virtual Private Network (VPN), the WAN routers and data with personal IP addresses are protected against access from the Internet and other MPLS VPNs. In addition, the provider can securely transfer the voice data from the public phone network to their own network (NGN) without the customer needing a high-performance firewall. The entire communication takes place in a private network. A network address translation for the conversion of a private IP address into a public one is therefore also not necessary.

The business SIP trunk is designed as a Trusted Network Interconnect, which means that a dedicated voice VPN is set up in the backbone of the Sunrise IP gateway at the customer's site. Therefore, the Sunrise IP gateway can be directly integrated into the customer's (voice) LAN. The customer's IT administrator specifies the IP gateway's LAN IP address, which is, at the same time, the remote peering IP of the SIP trunk. A special registrar IP address is not needed, and neither is a registration using credentials (username and password).

To establish SIP connectivity, all Sunrise needs is the information in the orange and red fields in the appendix (SBV_SIP-Peering.xls). Additional configuration settings for your PBX are available in the individual installation guidelines for Certified IP PBX systems. You will receive these guidelines from your Sunrise contact at Business Services at the time of activation.

Diagram/Appendix: Query of PBX parameters and IP addressing by Sunrise (SBV_SIP-Peering.xls)



¹ Default gateway address: Only necessary if the IP PBX and SBC are not on the same LAN subnetwork (for example, a firewall as an intermediary).

² Please note: Most customers set up a firewall only because of their IT security policy. For example, if the DMZ requirement says the following: "All external data connections must be routed over a firewall." In principle, the Sunrise SIP trunk does not require a firewall interface, as Sunrise makes a dedicated business voice service (over its own line) available to the customer over a separate MPLS VPN.