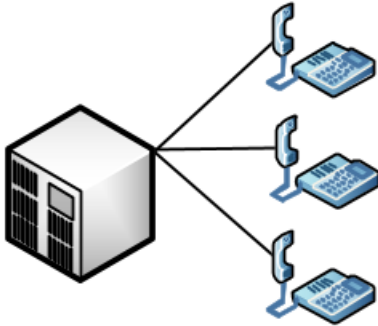


SIP Trunks Over Client's Internet

This product uses Session Initiation Protocol (SIP) and Voice over IP (VoIP) technology to deliver voice phone service to a client-owned SIP-capable phone system over the top of the client's internet connection. Each SIP Trunk allows one concurrent call.

On-Site SIP-Capable IP PBX/Phone System



Monitoring Devices



- Security system
- Meters for gas, refrigeration, boiler, water, temperature, etc.

Office Devices



Clarifications

- **Requires a high-quality/reliable internet connection** with a minimum bandwidth of 1.5Mbps/1.5Mbps. Calls use a small portion of the internet connection bandwidth while the call is active (87kbps per call).
- **For Maximum Voice Quality - VoIP Management Device (VMD)**
SIP Trunks can be installed with or without a Voice Management Device (VMD) which is a specially configured SonicWALL firewall, fully managed by POPP, which allows us to give voice traffic a higher priority than internet traffic to ensure the highest possible voice quality. The VMD can serve as the client's internet firewall or work in conjunction with a client's existing firewall. The VMD also allows for POPP to monitor and manage the service remotely which gives us additional troubleshooting capabilities and can often avoid a costly technician dispatch. For clients with dual internet connections, the VMD can provide automatic failover for voice traffic to virtually eliminate downtime.
- **Fire/Elevator Alarm Lines** - According to code, VoIP may only be used for Fire/Elevator lines if client has suitable battery backup or building generator systems in place to provide all voice and internet-related equipment with standby runtime of 8 hours (Fire Alarm Lines) or 4 hours (Elevator Lines) in the event of a local power outage. See [Alarm Lines Service Description](#).
- **Security/Burglar Alarm Lines** - VoIP may be used for security/burglar alarm lines with the client's understanding that the lines will not work in the event of a power or internet connection outage unless the client furnishes standby power systems and backup internet connection with automatic failover. See [Alarm Lines Service Description](#).
- **Emergency/911 Calls** – 911 calls will present either the main business phone number, or the DID (depending on phone system configuration) to the emergency services operator.
- **Included Calling Features** - VoIP Lines have calling features provided by POPP's Microsoft Metaswitch. See <https://popp.com/voicefeatures>
- **Optional Add-on Services** – Fax-To-Email, Special/Anywhere Phone Numbers, Account Codes, and Single/Router Voicemail Boxes.
- **Complimentary Domestic Long Distance** - Defined as 1000 minutes, per SIP Trunk, per month (pooled) for calls to the lower 48 contiguous United States. Usage in excess of this amount and all other long-distance calls shall be billed at POPP's published rates (LDv10).
- **Faxing or Modem Use** – A dedicated line is recommended that is not also used for voice calls.
- **International Outbound Calls** - For security reasons, POPP recommends international call blocking or 3-digit verified account codes on international calls.
- **White Pages and Directory Listings**, see [Directory Listings Policy](#)
- **Battery Backup** – Voice Service will not function in the event of a power outage unless all relevant phone/internet equipment on-site are connected to a client-supplied battery backup system and/or a generator backup system.