Enterprise Trunking SIP

Spectrum Enterprise SIP Trunking is designed to provide a cost-effective and reliable voice service for your IP PBX equipment. Below are some key considerations and interface requirements for a successful implementation for the PBX Administrator and IT/Network team.

A Spectrum Enterprise-owned and managed Enterprise SIP Gateway (ESG) device is installed at the client premise and connected to the client's IP PBX. Spectrum Enterprise manages voice service through its own network, from the PSTN to the ESG.

IP PBX interface

The ESG is the demarcation point between the Spectrum Enterprise network. The client is responsible for the LAN infrastructure and configuration, including the physical connection to the LAN port 2 on the ESG.

The ESG can be connected either directly to the IP PBX, or to a switch, router or on-site Session Border Controller (SBC).

- IP PBX-dedicated LAN with static or DHCP IP address
- SIP Registration: Static with optional authentication
- SBC Compliance: SIP Connect 1.1 support

Fiber connections to the Spectrum Enterprise network are managed by a dedicated router; DOCSIS connections use a cable modem. All calls are routed over the Spectrum Enterprise IP network; calls are never routed through the public Internet.

The VoIP configuration in the IP PBX should use a single subnet connecting to the ESG. SIP Trunking ports, IP phones, auto-attendant and voicemail ports should have IP addresses within the designated IP subnet. Use of devices outside that IP range may cause call failures or no audio.

ESG LAN configuration

- Bandwidth: 10 Mbps, 100 Mbps or 1 Gbps (100 Mbps recommended)
- Duplex: Full or Auto (full recommended)
- Registration: Static or DHCP (static recommended)

Physical space requirements

- Rack Shelf dimensions: 1U-2U in standard 19" rack mount, depending on capacity
- 110V AC power outlets (3)
- Site temperature between 32°F and 104°F (0° to 40°C) with adequate air circulation

Supported CODECs

- G.711
- T.38 for Fax
- DTMF RFC2833

Site access

The client must provide site access to Spectrum Enterprise personnel (or approved contractors) for the purposes of installing or maintaining services. This includes access to buildings and the point of demarcation (LAN switch, patch panel or PBX/SBC) for service installation and maintenance.

Power

Client will provide three (3) outlets of unswitched 100V/120V AC power. The client should provide an uninterruptible power supply (UPS). The SIP Trunking equipment will draw a maximum of 7 amps.

Custom feature support

Consult your Spectrum Enterprise Sales Engineer for support of custom IP PBX features and design configurations.

Custom caller ID for trunking

Other carriers' numbers, toll-free numbers and Spectrum

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Enterprise numbers from other accounts can be sent as the outbound Caller ID.

LAN configuration changes

Client must notify Spectrum Enterprise if any changes are made to the LAN configuration that could impact setup with the ESG by calling the local Commercial Client Care contact number below.

Network monitoring

Spectrum Enterprise monitors the ESG 24/7 by ping polling the device every five (5) minutes. Polling data includes registration failure, port-down status and power failure. Real-time alarms are sent directly to the Commercial Network Operations Center.

Quality of service (QOS)

All network switches, routers and systems are configured for prioritized voice traffic.

Service-level agreement (SLA)

Spectrum Enterprise SIP Trunking has a service-level agreement of 99.99% target availability, excluding planned maintenance outages.

Billing and technical support

Spectrum Enterprise provides assistance in trouble reporting for any billing, technical or SIP Trunking service-related issues.

Client care contact numbers
Bright House Networks: 1-877-470-2023
Charter: 1-866-603-3199
Time Warner Cable - Hawaii: 1-808-643-8510
Time Warner Cable: 1-888-812-2591

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