Troubleshoot a SPA112 and a SPA122 when the Connected Phones Do Not Ring

Objective

This document explains some options to troubleshoot a SPA112 and a SPA122 when the phones connected to them fail to ring out. When the phone does not ring this means the call forwarding features on the phone are enabled. The user knows the call forwarding feature on the phone is enabled when there is a slow tone on the line. The phones that do not ring can be troubleshooted by two methods, ring voltage and change in the waveform type. The ring voltage is dependent on the voltage of the resident which the user resides. The waveform can be changed from trapezoid to sinusoidal or sinusoidal to trapezoid; which are set due to the session initiation protocol (SIP).

Applicable Devices | Firmware Version

- SPA112 | 1.3.2.(014) (Download latest)
- SPA122 | 1.3.2.(014) (Download latest)

Introduction

Depending on the model and Firmware version, SPA Phones may use service from an Internet Telephony Service Provider (ITSP) or an IP Private Branch Exchange (PBX) call control server. WebEx Calling, Ring Central, and Verizon are examples of an ITSP. Some examples of IP PBX services that may work with SPA phones include, Asterisk, Centile, and Metaswitch platforms.

The SPA series uses a call controller, which is a separate system that provides services such as call park, voicemail, and caller ID. Since SPA phones do not use a specific call controller, access and procedures vary.

Each call controller can follow different procedures, so we can't tell you exactly how yours will work. For information and help with your specific commands, refer to the help sites from the provider you chose. If you have an administrator, contact them for details and possible training.

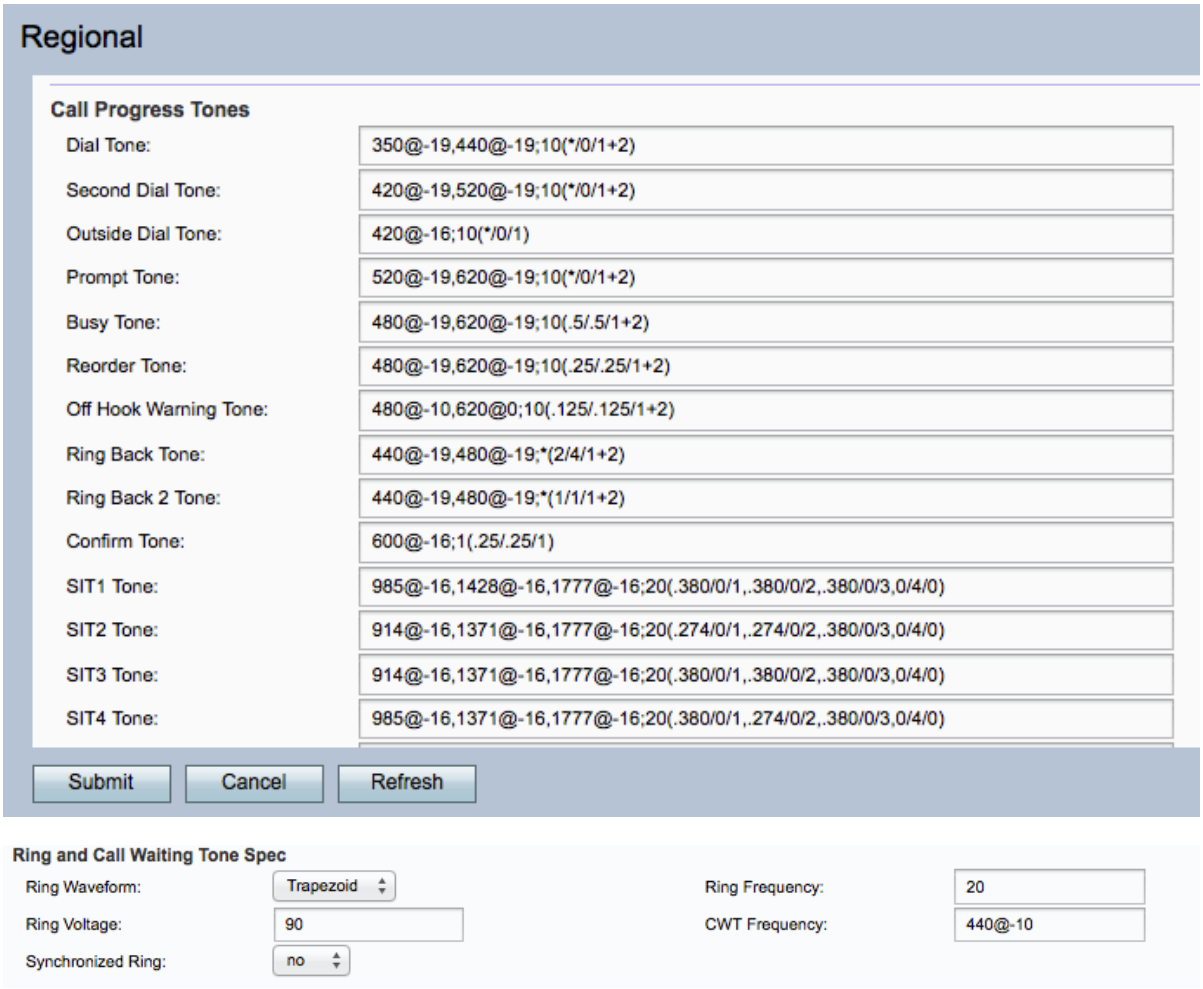
That being said, depending on how your SPA phones have been configured, these procedures may or may not work for you. Contact your administrator for details.

Troubleshoot Phones That Do Not Ring

The problem could be solved by two methods.

Ring Voltage

Step 1. Log into the Phone Adapter Configuration Utility and choose **Voice > Regional.** The *Regional* page opens:



Under the Ring and Call Waiting Tone Spec area:

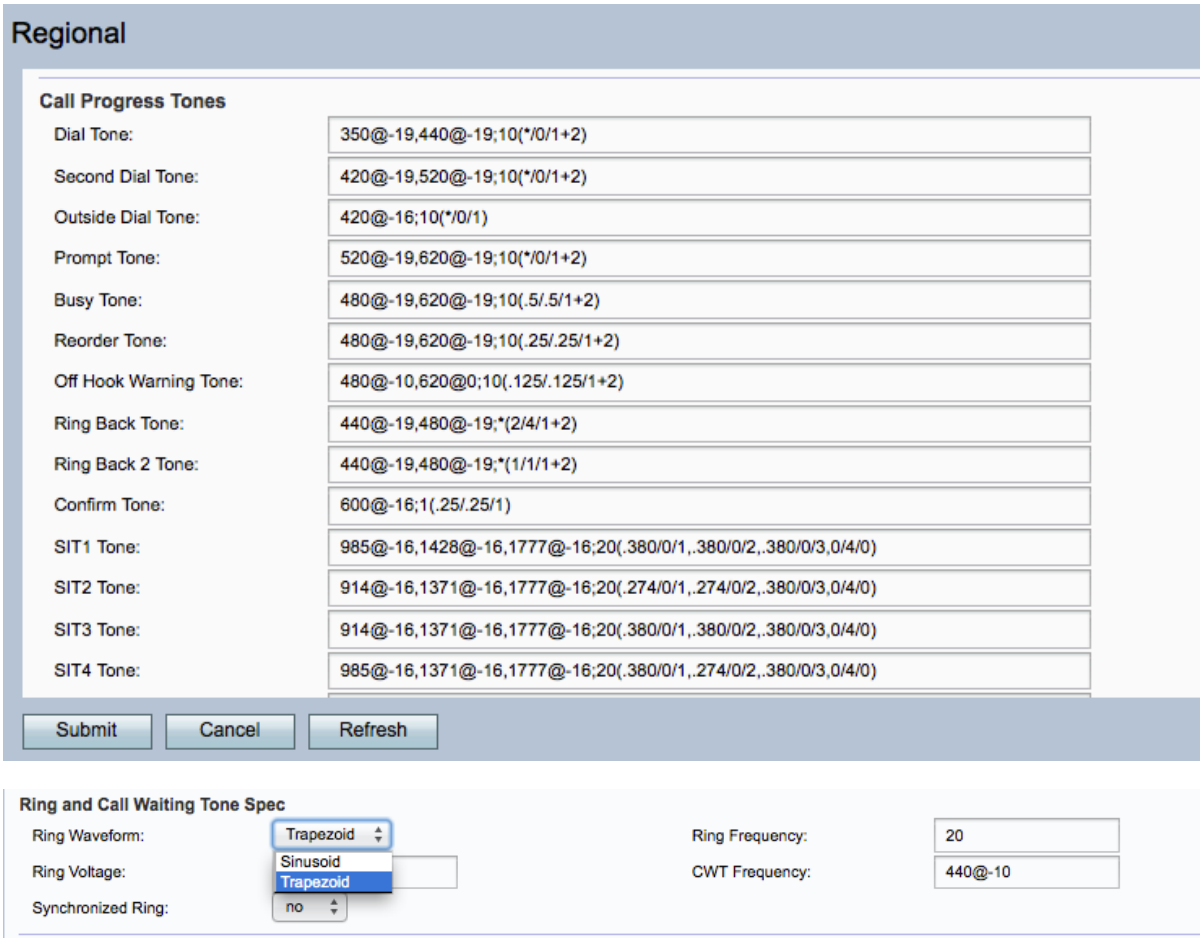
Step 2. Check if the Ring Voltage value entered in the Ring Voltage field is in accordance with the country settings. The ring voltage is a digital sound file that plays when an incoming call is on the phone line. If not, enter the appropriate ring voltage value for the country in the Ring Voltage field. For example, the typical ring voltage for the United States of America is 90V at 20Hz. This voltage may vary due to the distance to a Central Office, line condition etc.

Note: As this is attempted, be sure that the value of Ring Voltage does not exceed the specific value set by your country. For example the value should not reach greater than 90V in the case of the United States of America.

Step 3. Click **Submit** to save the configuration.

Change the Waveform Type

Step 1. Log into the Phone Adapter Configuration Utility and choose **Voice > Regional.** The *Regional* page opens:



Under the Ring and Call Waiting Tone Spec area:

Step 2. From the Ring Voltage drop-down list, choose an option between Sinusoidal or Trapezoid. Change the waveform type from Sinusoidal to Trapezoid or Trapezoid to Sinusoidal in the Ring Waveform field could also solve the problem. These waveforms are to be set due to the SIP provider.

Step 3. Click **Submit** to save the configuration.

For more information, including links to all Cisco articles the SPA112 or SPA122, check out the following links:

- Cisco SPA112 ATA with Router Product Page
- Cisco SPA122 ATA with Router Product Page