

# Configure Ring and Call Waiting Patterns in Regional Voice Settings on SPA112 and SPA122

## Objective

Distinctive ring and call waiting patterns are used to adjust ring and call waiting cadences. The distinctive ring identifies different callers on the same line while the call waiting patterns are used to identify different callers who are on wait on the same line. This article explains how to configure a distinctive ring and call waiting patterns in regional voice parameters on a SPA112 or a SPA122.

## Applicable Devices

- SPA112
- SPA122

## Software Version

- 1.3.2(014)

## Distinctive Ring and Call Waiting Patterns Configuration

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

## Regional

### Distinctive Ring Patterns

Ring1 Cadence:	60(2/4)	Ring2 Cadence:	60(.8/.4,.8/4)
Ring3 Cadence:	60(.4/2,.4/2,.8/4)	Ring4 Cadence:	60(.3/2,1/2,.3/4)
Ring5 Cadence:	1(.5/5)	Ring6 Cadence:	60(.2/4,.2/4,.2/4)
Ring7 Cadence:	60(.4/2,.4/2,.4/4)	Ring8 Cadence:	60(0.25/9.75)

### Distinctive Call Waiting Tone Patterns

CWT1 Cadence:	30(.3/9.7)	CWT2 Cadence:	30(.1/1,.1/9.7)
CWT3 Cadence:	30(.1/1,.1/1,.1/9.7)	CWT4 Cadence:	30(.1/1,.3/1,.1/9.3)
CWT5 Cadence:	1(.5/5)	CWT6 Cadence:	30(.1/1,.3/2,.3/9.1)
CWT7 Cadence:	30(.3/1,.3/1,.1/9.1)	CWT8 Cadence:	2.3(.3/2)

### Distinctive Ring/CWT Pattern Names

Ring1 Name:	Bellcore-r1	Ring2 Name:	Bellcore-r2
Ring3 Name:	Bellcore-r3	Ring4 Name:	Bellcore-r4
Ring5 Name:	Bellcore-r5	Ring6 Name:	Bellcore-r6
Ring7 Name:	Bellcore-r7	Ring8 Name:	Bellcore-r8

### Ring and Call Waiting Tone Spec

Ring Waveform:	Trapezoid	Ring Frequency:	20
Ring Voltage:	85	CWT Frequency:	440@-10
Synchronized Ring:	no		

## Distinctive Ring Patterns

The Ring Cadence field values (called cadence scripts) are defined as follows: Total Ring Time (How long the tone is emitted in seconds / how long the tone is silent in secs). For example, the value 60(2/4) would emit a tone for 2 seconds and then remain silent for 4 seconds, repeating until 60 seconds have passed. Multiple tone on/off pairs can be entered in one cadence script.

### Distinctive Ring Patterns

Ring1 Cadence:	60(2/4)	Ring2 Cadence:	60(.8/.4,.8/4)
Ring3 Cadence:	60(.4/2,.4/2,.8/4)	Ring4 Cadence:	60(.3/2,1/2,.3/4)
Ring5 Cadence:	1(.5/5)	Ring6 Cadence:	60(.2/4,.2/4,.2/4)
Ring7 Cadence:	60(.4/2,.4/2,.4/4)	Ring8 Cadence:	60(0.25/9.75)

Step 2. Enter values in the Ring Cadence fields. These are cadence scripts for corresponding distinctive ring tones on the phones connected to the device.

Step 3. Click the **Submit** button to save changes.

## Distinctive Call Waiting Tone Patterns

The Call Waiting Tones (CWT) are used to identify different callers who are on wait on the same line.

Distinctive Call Waiting Tone Patterns			
CWT1 Cadence:	30(.3/9.7)	CWT2 Cadence:	30(.1/1.1, .1/9.7)
CWT3 Cadence:	30(.1/1.1, .1/1.1, .1/9.7)	CWT4 Cadence:	30(.1/1.1, .3/1.1, .1/9.3)
CWT5 Cadence:	1(.5/5)	CWT6 Cadence:	30(.1/1.1, .3/2.2, .3/9.1)
CWT7 Cadence:	30(.3/1.1, .3/1.1, .1/9.1)	CWT8 Cadence:	2.3(.3/2)

Step 2. Enter values in the CWT Cadence field. These are cadence scripts for corresponding distinctive CWT.

Step 3. Click the **Submit** button to save changes.

## Distinctive Ring and Call Waiting Tone Pattern Names

Distinctive Ring/CWT Pattern Names			
Ring1 Name:	Bellcore-r1	Ring2 Name:	Bellcore-r2
Ring3 Name:	Bellcore-r3	Ring4 Name:	Bellcore-r4
Ring5 Name:	Bellcore-r5	Ring6 Name:	Bellcore-r6
Ring7 Name:	Bellcore-r7	Ring8 Name:	Bellcore-r8
Ring Waveform:	Trapezoid ▼	Ring Frequency:	20
Ring Voltage:	85	CWT Frequency:	440@-10
Synchronized Ring:	no ▼		

Step 2. Enter values in the Ring Name fields. These are the names in an INVITE's Alert-Info Header to pick distinctive ring/CWT 1 - 8 for the inbound call.

Distinctive Ring/CWT Pattern Names			
Ring1 Name:	Bellcore-r1	Ring2 Name:	Bellcore-r2
Ring3 Name:	Bellcore-r3	Ring4 Name:	Bellcore-r4
Ring5 Name:	Bellcore-r5	Ring6 Name:	Bellcore-r6
Ring7 Name:	Bellcore-r7	Ring8 Name:	Bellcore-r8
Ring Waveform:	Trapezoid ▼	Ring Frequency:	20
Ring Voltage:	85	CWT Frequency:	440@-10
Synchronized Ring:	no ▼		

Step 3. Choose the desired waveform for the calls from the Ring Waveform drop-down list. This is the waveform for the ringing signal.

- Sinusoid — The ring signal is sinusoidal.
- Trapezoid — The ring signal is trapezoidal.

Step 4. Enter a desired value in the Ring Frequency field. This is the frequency of the ringing signal, ranging from 10 to 100 Hz.

Step 5. Enter a desired value in the Ring Voltage field. This is the ringing voltage. It ranges from 60 to 90 V.

Step 6. Enter a desired value in the CWT Frequency field. This is the frequency script of the call waiting tone.

Step 7. (Optional) To have all the lines ring until one line answers the call choose **yes** from the Synchronized Ring drop-down list. The default setting is No.

Step 8. Click the **Submit** button to save changes.