IP Phone Ringtone Issues Troubleshoot

Contents

Introduction

This document describes how troubleshoot issues with your Cisco Unified IP Phone ringtones.

Adjust Ringtone Configuration

Complete these steps in order to adjust the configuration.

1. Choose **> User Preferences > Rings**.

2. Choose a phone line or the default ring setting.

3. Choose a ringtone in order to play a sample of it.

4. Press **Select** and **Save** in order to set the ringtone, or press **Cancel**.

Check Ringtone Files

By default, you have a variety of ringtones. You can check the ringtones if you search in Cisco Unified Communications Manager (CUCM) TFTP files for **.raw**. This list is sent to the phone via the **ringlist.xml** file in TFTP from CUCM when the request is made.

This file is not sent during phone bootup, but when you naviagate to **User Preference > Rings > Default Ring**, you see an HTTP request sent by the phone to the TFTP server that requests the **ringlist.xml** file.

```
10.65.47.129      10.106.92.6      HTTP      188 GET /ringlist.xml HTTP/1.1
10.106.92.6       10.65.47.129     HTTP      191 HTTP/1.1 200 OK  (*/*)
```

Now when you navigate through this list and try to play a file, you see the GET request from the phone to the TFTP server for this file.

```
10.106.92.6       HTTP      185 GET /Chime.raw HTTP/1.1
10.65.47.129      HTTP      774 HTTP/1.1 200 OK  (*/*)
```

The request will only be placed if the phone does not have this file downloaded. If you try to play the file again, you see the phone does not send a request.

Troubleshoot

Complete these steps in order to troubleshoot issues with your ringtone.

1. If a ringtone file does not play, verify that it does work with the default ringtone, Chip1, and then with the other default files in CUCM.

2. Determine if the file that does not play is a default ringtone or a custom ring file that was uploaded to TFTP.

3. If it is a custom ring file, make sure it matches Cisco's requirements:

   Maximum ring size - 16,080 samplesMinimum ring size - 240 samplesNumber of samples in the ring is evenly divisible by 240Ring starts and ends at the zero crossingAudio editing package that supports these file-format requirements

   Note: In order to create Pulse Code Modulation (PCM) files for custom phone rings, you can use any standard.

4. Try to play the file from the phone in order to see if it works.

5. Collect a packet capture from the phone.

Example Failure Senario for the Ring File

A custom ring file did not play on the phone but all of the default files did play.

The packet captures showed the file was requested by the phone, and it received a 200 OK for that.

```
10.18.244.150      10.19.22.2          HTTP          110 GET /80x-dojdi.raw HTTP/1.1
10.19.22.2         10.18.244.150       HTTP          688 HTTP/1.1 200 OK   (*/*)
```

Then, the TFTP file transfer started.

```
10.18.244.150    10.19.22.2      TFTP        64 Read Request, File: 80x-dojdi.raw, Transfer type: octet
10.19.22.2       10.18.244.150   TFTP       558 Data Packet, Block: 1
10.18.244.150    10.19.22.2      TFTP        60 Acknowledgement, Block: 1
10.19.22.2       10.18.244.150   TFTP       558 Data Packet, Block: 2
10.18.244.150    10.19.22.2      TFTP        60 Acknowledgement, Block: 2
10.19.22.2       10.18.244.150   TFTP       558 Data Packet, Block: 3
```

During the TFTP transfer, it failed.

```
10.19.22.2       10.18.244.150   TFTP       558 Data Packet, Block: 159
10.18.244.150    10.19.22.2      TFTP        60 Acknowledgement, Block: 159
10.19.22.2       10.18.244.150   TFTP       558 Data Packet, Block: 160
10.18.244.150    10.19.22.2      TFTP        60 Acknowledgement, Block: 160
10.19.22.2       10.18.244.150   TFTP       558 Data Packet, Block: 161
10.18.244.150    10.19.22.2      TFTP        89 Error Code, Code: Not defined, Message: write Error
```

In this case, the file did not meet Cisco's requirements.