

Technical Bulletin CS-22-03

Using Distinctive Ringtones via Alert-Info Headers

This technical bulletin explains how to use the SIP Alert-Info Header to use distinctive ringtones on your Versity, Android-based handsets; or your Spectralink 84-Series handsets.

System Affected

Spectralink 84-Series

Versity 92-Series

Versity 95-Series

Versity 96-Series

Description

There are a number of situations where you may want to have a specific ringtone used for incoming calls but still retain the default ringtone for a other calls. This can be accomplished by loading unique ringtone files into the phone's Ringtones folder and then leveraging the SIP Alert-Info header that can be sent by any SIP platform. You can also leverage the Alert-Info header by pointing to a URL and the handset will download and play the ringtone upon call initiation. In this document, we'll cover the aspects of performing this configuration on the Spectralink Versity handset, when loading the file onto the phone and using a network storage location. And we'll discuss how this can be used with an 84-Series handset as well.

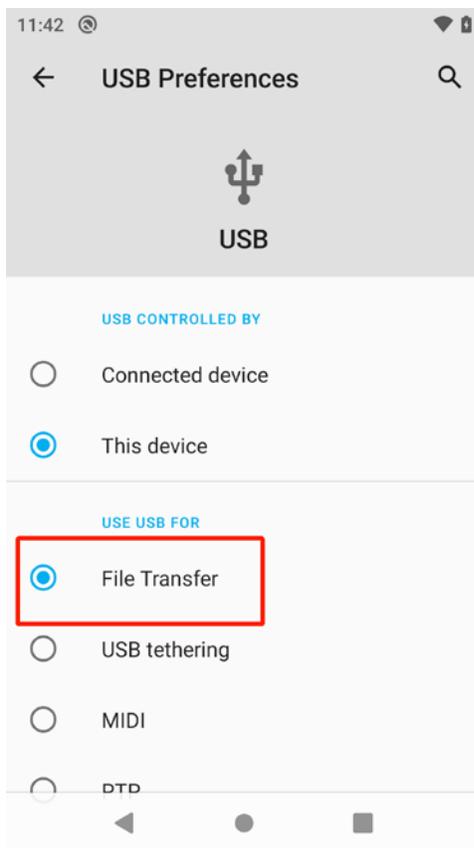
Ringtone

For the Versity handset, the first step is to get your ringtone onto the phone. There are some methods available depending on your own environment. You can potentially use your EMM/MDM, but for the purposes of this document, we will focus on manually loading the file. Loading the file can be done via USB or even by loading it to a web server and directing the phone's web browser to that location. For the 84-Series handsets, you'll want to host the file on a network location only, which is acceptable for the Versity handsets as well.

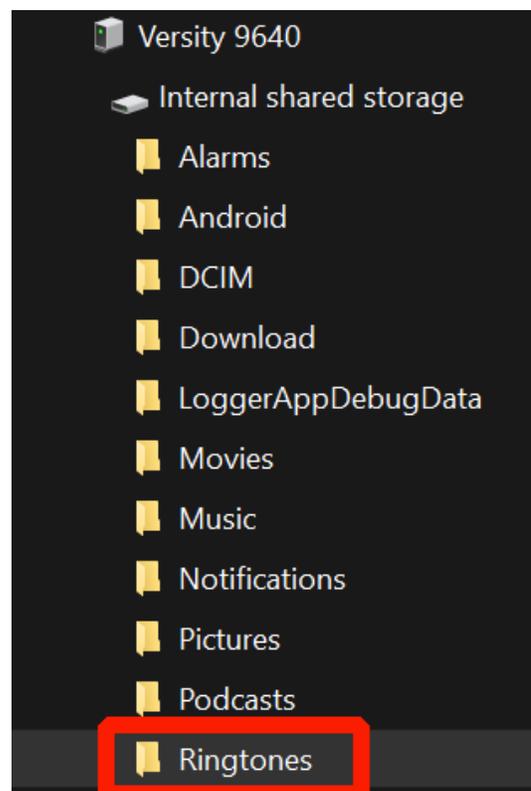
For Versity, the important thing is that the ringtone file be in the OGG file format and that it be placed into the Ringtones folder in the handset. For this document, we'll load the ringtone file via USB. When loading the file, connect your handset to your PC via your USB cable. On the handset, make sure you have the home screen visible and then swipe down from the top and you should see this notification:



Tap the notification twice to display the USB Preferences screen. And then tap the radio button next to File Transfer:



Now you can open your file explorer on your PC and you will be able to navigate the file structure on the handset. You will need to place the ringtone file, or files, you want to use into the Ringtones folder.



When loading the file onto a network storage location, you should only use a WAV file format for both Versity and 84-Series handsets. This helps ensure compatibility between products and even between different vendor handset types. You could use the OGG format for Versity, but these are much larger file formats and will require more network bandwidth. Additionally, the handsets must download the file each time a call is placed that references this file.

Alert-Info Header

The SIP Alert-Info header is defined in RFC 3261, and further updated by RFC 7462. Because this is a standards-based function, the usage of it should be available in most SIP call server platforms. The header takes the form of a URL that can point to the ringtone file stored on the handset, or it can point to a location stored on a network like a web server. The header will look like this:

```
Via: SIP/2.0/TCP 10.225.2.31:5060;branch-z9hG4bKd45bon1008ov8fullp10.1
From: "Test User 1"<sip:1516@10.225.2.31;user=phone>;tag=1848153283-150652506448
To: "Test User 2"<sip:1522@10.225.2.31>
Call-ID: 26e3756135687429544642k56675rmwp
CSeq: 16159 INVITE
Contact: <sip:1516@10.225.2.31;5060;transport=tcp>
Alert-Info: <file://CodeBlue.ogg>
Allow:
ACK,PRACK,BYE,CANCEL,INVITE,UPDATE,MESSAGE,INFO,OPTIONS,SUBSCRIBE,NOTIFY,REFER
Call-Info: <sip:10.225.2.31>;appearance-index=1
Recv-Info: x-asterisk-client-session-info
Accept: application/sdp,application/dtmf-relay,text/plain
Support: replaces
Max-Forwards: 19
Content-Type: application/sdp
Content-Length: 330
```

The highlighted line in the SIP INVITE above is an example of what this header might look like when pointing to a ringtone file stored in the handset. If you are pointing to a network resource location, then the URL might look like this: `<http://10.225.3.12/sounds/CodeBlue.wav>`



Note

You cannot use the **file://** URL reference on 84-Series handsets. It is always recommended to use the network storage location instead for 84-Series handsets, which allows for compatibility across products and vendors when referencing a WAV format file stored on a web server.

The Alert-Info header is typically not something that an admin can just add to their call server configuration. But there are some call servers that do provide a mechanism, such as Asterisk. A line can be added to the `extensions.conf` configuration file of the Asterisk server that will add the Alert-Info header to certain calls.

```
exten => s,n,SIPAddHeader("Alert-Info:<file://CodeBlue.ogg>\;")
```

Similarly, you could use the network location in the same way.

```
exten => s,n,SIPAddHeader("Alert-Info:<http://10.225.3.12/sounds/CodeBlue.wav>\;")
```

If you're unsure whether your call server supports custom configuration of the Alert-Info header, please contact your call server vendor for details.

8400 Specific Information

CMS Integration

When using CMS, you should upload the wave files into the Resource Files and assign them to slots in the Tones screen. The assignment in the Tones screen should be performed at the Enterprise level to ensure all devices in the system have access to the ringtone files. Then use the <ftp://localhost/filename.wav> format for the Alert-Info: field. This will ensure that the handset is able to find and use the correct file. The CMS must also be active for the handset to use the wave file as it is downloaded automatically at the time of boot by the handset.

Non-CMS Provisioning Servers

When not using CMS, the implication for the device means that there could be an FTP/S, HTTP/S or even TFTP server present acting as the provisioning server. The provisioning server setup is covered in other documentation, as is the configuration of the actual ringtone definitions¹. However, the configuration of the Alert-Info Header is the same as it would be for CMS and should use the same format, <ftp://localhost/filename.wav>.

¹ Spectralink 84-Series Wireless Telephone Admin Guide:
https://support.spectralink.com/sites/default/files/resource_files/1725-86984-000_6.pdf

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