TIP 42: Alerts with Audio

IPAWS Alerting Authorities can add an MP3 audio file to their Common Alerting Protocol (CAP) message for distribution via the Emergency Alert System (EAS).

Without an audio file, the Text-to-Speech (TTS) function in the EAS device will convert the message into spoken words. IPAWS recommends audio with human speech instead, to improve clarity for the broadcast audience.

Playing the audio file is better for listeners **because TTS can mispronounce words** and intended number sequences (e.g., 911 may sound like "nine hundred and eleven").

The audio recording can't be longer than two minutes.

Emergency Alert System

EAS audio is either linked or embedded.

Linked means there is a URI (universal resource identifier) in the CAP message that points to the MP3 location where an EAS device retrieves the audio file to play.

Embedded means the MP3 file is converted and stored within the CAP message.

Most vendors of alert origination software use linked audio for EAS. A few vendors use embedded audio for EAS. If you expect to include audio, check with your vendor to understand how your software handles audio files.

Wireless Emergency Alerts

Wireless Emergency Alerts (WEA) can't use attached audio.

Sometimes, an Alerting Authority will issue a single alert for distribution over EAS and WEA simultaneously. Due to a bug in IPAWS-OPEN, **an alert with embedded EAS audio will fail for WEA.** This is not an issue if you are using linked EAS audio.

This bug will be fixed in the October 2022 IPAWS-OPEN release. Until then, the workaround for those using embedded audio for EAS is to simply issue two separate alerts: One alert for EAS with the embedded audio, and a separate alert for WEA that does NOT contain embedded audio.

Non-Weather Emergency Messages

Non-Weather Emergency Messages sent via IPAWS to NOAA Weather Radio (NWR) can't use attached audio. Weather forecasters receiving the alert will convert the text portion into speech for broadcast by NWR. For more information see Tip 40, NWEMS Over NOAA Weather Radio.

