

# **BWF and XMP and ID3 - Oh my! Building Practical Software for Digital Audio Metadata**

**MICHAEL ANDREC**

**Abstract:** When digitizing audio recordings in-house, it can be convenient to immediately embed preservation and descriptive metadata in the resulting audio files. Unfortunately, existing open-source tools, such as the *de facto* standard FADGI *BWFMetaEdit*, are cumbersome to use. This presentation will introduce new open-source software developed to simplify the interactive creation and management of embedded metadata in audio files. *autoBWF* is an alternative GUI for *BWFMetaEdit* that pre-fills standard Broadcast Wave metadata fields with values derived from file naming conventions, filesystem metadata, and a choice of customizable boilerplate texts. Unlike *BWFMetaEdit* and *exiftool*, *autoBWF* can write XMP tags in addition to BWF and RIFF fields, thereby greatly increasing the descriptive capabilities of the embedded metadata. *autoBWF* can also pre-populate fields based on existing metadata in another file, thereby reducing or even eliminating the need for manual data entry when creating derivative files. The *autolame* tool (a wrapper for the *lame* MP3 encoder) can be used to automatically migrate Wave metadata to XMP and ID3v2 tags in MP3 distribution files. This allows for an end-to-end audio metadata pipeline that includes the possibility of export to access and discovery systems like the Oral History Metadata Synchronizer (OHMS) or to PBCore.

## **About the Author:**

*Michael Andrec* has been a lone arranger archivist at the Ukrainian History and Education Center in Somerset, NJ since 2010, where he has been working to bring the multilingual collections accumulated by the Center since the 1960s up to professional standards of arrangement, description, preservation, and accessibility. The holdings of the UHEC include one of the most significant collections of Ukrainian recorded sound in the world, containing unique open reel and cassette recordings as well as shellac and vinyl phonograph records. Michael is responsible for the UHEC's digitization program, and has been developing methods and software to streamline and maximize the efficiency of that effort. Michael is a member of SAA, ACA, ARSC, and MARAC, and has served on the board of the Archivists Round Table of Metropolitan New York.