

## BIBFRAME AV Assessment: Appendix F - Example Audio Resources (Audio-physical-analog, Audio-physical-digital, and Audio-file)

AVPreserve, 23 September 2015 (revised January 4, 2016)

The resources featured in this scenario are three instances of the work Mo' Roots by Taj Mahal (Resource5). Resource6 is the 1974 LP release of the work. Resource7 is the 2008 CD release of the work. Resource8 is a preservation master of the CD release (a WAV audio file), generated by the holding institution in order to create onsite digital access copies of the resource.

Note that this example uses the BIBFRAME vocabulary 1.0 as it existed in February 2015.

```
@prefix rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#> .
@prefix bf: <http://bibframe.org/vocab/> .
@prefix bfe: <http://bibframe.org/vocabExtended_toBeDone/> .
@prefix ebucore: <http://www.ebu.ch/metadata/ontologies/ebucore/ebucore> .
@prefix rdam: <http://rdaregistry.info/Elements/m>
@prefix rdae: <http://rdaregistry.info/Elements/e>
@prefix schema: <http://schema.org/>
```

### Resource5

```
a bf:Audio, bf:Work ;
bf:title "Mo' Roots" ;
bf:hasInstance Resource 6 ;
bf:hasInstance Resource 7 ;
bf:hasInstance Resource 8 .
```

### Resource6

```
a bf:Instance ;
bf:isInstanceOf Resource5 ;
bf:mediaCategory <http://id.loc.gov/vocabulary/mediaTypes/s> ; # audio
bf:carrierCategory <http://id.loc.gov/vocabulary/carriers/sd> ; #audio disc
bf:extent "1 audio disc" ;
bf:format <http://metadataregistry.org/concept/show/id/2119.html> ; #LP Record
bf:originDate "1974" ;
bfe:diameter "12 in." ; # see note [1]
rdam:baseMaterial <http://rdaregistry.info/termList/RDABaseMaterial/#1022> ; # vinyl; see note [2]
rdam:generationOfAudioRecording<http://pbcore.org/vocabularies/instantiationGenerations#master-program> ; # Master-program; see note [2], [3]
bfe:typeOfResource <http://rdaregistry.info/termList/typeRec/1001> ; # analog; see note [4]
rdam:playingSpeed "33 1/2 rpm" ; # see note [2]
ebucore:audioTrackConfiguration
<http://www.ebu.ch/metadata/ontologies/skos/ebu_AudioFormatCodeCS.rdf#_4> ; # 2/0 (Stereo); see note [2]
rdam:recordingMedium "needle sound" ; # see note [2], [5]
rdam:grooveCharacteristic <http://rdaregistry.info/termList/grooveWidth/#1002> ; # microgroove; see note [2]
rdam:specialPlaybackCharacteristic "RIAA" ; # see note [2]
bf:duration "00:33:57" ;
bf:language <http://id.loc.gov/vocabulary/languages/eng> ; # English
bf:language <http://id.loc.gov/vocabulary/languages/cpf> . # Creole-Pidgin French
```

### Resource7

a bf:Instance ;  
bf:isInstanceOf Resource5 ;  
bf:hasDerivative Resource 8 ;  
bf:mediaCategory <http://id.loc.gov/vocabulary/mediaTypes/s> ; # audio  
bf:carrierCategory <http://id.loc.gov/vocabulary/carriers/sd> ; # audio disc  
bf:extent "1 audio disc" ;  
bf:format <http://metadataregistry.org/concept/show/id/1997.html> ; # CD  
bf:creationDate "2008" ;  
bfe:diameter "4.7 in." ; # see note [1]  
rdam:baseMaterial <http://rdaregistry.info/termList/RDABaseMaterial/#1014> ; # plastic; see note [2]  
rdam:generationOfAudioRecording<http://pbcore.org/vocabularies/instantiationGenerations#master-program> ; # Master-program; see note [2], [3]  
bfe:typeOfResource <http://rdaregistry.info/termList/typeRec/1002> ; # digital; see note [4]  
ebucore:audioTrackConfiguration  
<http://www.ebu.ch/metadata/ontologies/skos/ebu\_AudioFormatCodeCS.rdf#\_4> ; # 2/0 (Stereo); see note [2]  
rdam:recordingMedium <http://rdaregistry.info/termList/recMedium/1003> ; # optical; see note [2]  
rdam:specialPlaybackCharacteristic "Digital recording" ; # see note [2], [6]  
bf:duration "00:33:57" ;  
ebucore:bitRate "1,411.2 Kbps" ; # see note [2]  
ebucore:startTimeCode "00:00:00" ; # see note [2]  
ebucore:sampleRate <http://pbcore.org/vocabularies/essenceTrackSamplingRate#44-1> ; # 44.1; see note [2]  
ebucore:bitDepth <http://pbcore.org/vocabularies/essenceTrackBitDepth#16> ; # 16; see note [2]  
bf:language <http://id.loc.gov/vocabulary/languages/eng> ; # English  
bf:language <http://id.loc.gov/vocabulary/languages/cpf> ; # Creole-Pidgin French  
ebucore:hasAudioEncodingFormat  
<http://www.ebu.ch/metadata/ontologies/skos/ebu\_AudioCompressionCodeCS.rdf#\_11> . # Linear PCM; see note [2]

#### Resource8

a bf:Instance ;  
bf:isInstanceOf Resource5 ;  
bf:isDerivativeOf Resource 7 ;  
bf:mediaCategory <http://id.loc.gov/vocabulary/mediaTypes/s> ; # audio  
bf:carrierCategory <http://id.loc.gov/vocabulary/carriers/cr> ; # online resource; see note [8]  
bf:extent "1 audio file (WAV)" ;  
bf:format <http://rdaregistry.info/termList/encFormat/#1013> ; # WAV  
bf:creationDate "2014" ;  
rdam:generationOfAudioRecording <http://pbcore.org/vocabularies/instantiationGenerations#master-preservation> ; # Master-preservation; see note [2]  
bfe:typeOfResource <http://rdaregistry.info/termList/typeRec/1002> ; # digital; see note [4]  
ebucore:audioTrackConfiguration  
<http://www.ebu.ch/metadata/ontologies/skos/ebu\_AudioFormatCodeCS.rdf#\_4> ; # 2/0 (Stereo); see note [2]  
ebucore:mimetype "audio/wav" ; # see note [2], [7]  
ebucore:fileSize "11234456543" ; # see note [2]  
bf:duration "00:33:57" ;  
ebucore:bitRate "1,411.2 Kbps" ; # see note [2]  
ebucore:startTimeCode "00:00:00" ; # see note [2]  
ebucore:sampleRate <http://pbcore.org/vocabularies/essenceTrackSamplingRate#44-1> ; # 44.1; see note [2]  
ebucore:bitDepth <http://pbcore.org/vocabularies/essenceTrackBitDepth#16> ; # 16; see note [2]  
bf:language <http://id.loc.gov/vocabulary/languages/eng> ; # English  
bf:language <http://id.loc.gov/vocabulary/languages/cpf> ; # Creole-Pidgin French

ebu:core:hasAudioEncodingFormat

<[http://www.ebu.ch/metadata/ontologies/skos/ebu\\_AudioCompressionCodeCS.rdf#\\_11](http://www.ebu.ch/metadata/ontologies/skos/ebu_AudioCompressionCodeCS.rdf#_11)> . # Linear PCM;  
see note [2]

[1] We are proposing that BF be extended to document specific dimensions rather than a single bf:dimensions property. This would include bf:width, bf:diameter, bf:length. These could be subproperties of bf:dimensions if users desire to be more specific.

[2] Although we are using a property from RDA RDF here (rdam:baseMaterial), we feel that LC and the BIBFRAME community should decide whether to borrow properties from other vocabularies (as we have done here) or to extend BIBFRAME to support the expression of new attributes. In this case, an alternative approach would be to extend BIBFRAME to include property bf:baseMaterial.

[3] AVPS note: I am unclear what would be the best generation vocab to use here. PBCore generations are heavily focused on video generations. The RDA vocab list is very light and does not include possible values for this particular need. I think we may need to recommend an extension of some vocabulary. Maybe, however, this property is only useful when the instance is a unique object and not a mass produced object.

[4] We are proposing an extension of an attribute found in the content standards called Type of Recording. This attribute is used to distinguish between analog and digital sound recordings. In MARC it exists as field 344 subfield a as well as fixed field 007 position 13, when the resource is a sound recording. We feel that this distinction between analog and digital resource can be made across all audiovisual resources and propose an extension of its applicability and the establishment of a new BIBFRAME property for Type of Resource, bf:typeOfResource.

[5] The available vocabularies that support Sound Recording Medium, whether from RDA RDF ([http://metadatareregistry.org/concept/list/vocabulary\\_id/79.html](http://metadatareregistry.org/concept/list/vocabulary_id/79.html)) or from the various bibliographic content standards named and analyzed in this study target the description of sound recording medium as it exists on film stock (except, surprisingly, FIAF, which does provide an option of "needle sound." This attribute, however, could be useful to describe the sound recording medium of any given sound recording, e.g., "needle sound" for LPs or cylinders, "magnetic" for open-reel magnetic audio tape, "optical" for CDs. The current set of RDA RDF vocabularies stops short of including "needle sound" as an option. We recommend the use of this attribute (rdam:recordingMedium, or [if extended] bf:soundRecordingMedium) to describe sound on film as well as other stand-alone sound recording media.

[6] This value is pulled from the 007 controlled value list for Special Playback Characteristics from fixed field 007 position 12 (when the resource is a sound recording). We were unable to find an existing SKOS concept to document this value.

[7] AVPS note: I was having difficulty finding the Mimetype for WAV on the INAN list:  
<http://www.iana.org/assignments/media-types/media-types.xhtml>.

[8] For bf:carrierCategory, RDA's list of carrier types provides only one option for describing digital resources, i.e., online resource. We are using this option here, but we feel further development is needed to offer acceptable terms for describing the carrier property of digital resources. Not all digital resources are intended to be accessed "online." The term is assumptive and misleading. Preference would be to say that this resource is a "digital audio file" or similar.