

Treatment of Carrier Technical Details in BIBFRAME

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When describing physical carriers, RDA provides data elements for various technical details such as Base Material, Generation, Polarity, Sound Characteristic, Video Characteristic, etc. (RDA rules 3.6 through 3.20). In all there are 79 RDA properties for this kind of information. Examples include:

`rdam:baseMaterial "metal"`

`rdam:mount "wood"`

`rdam:generationOfDigitalResource "master"`

`rdam:bookFormat "folio"`

`rdam:specialPlaybackCharacteristic "Dolby"`

`rdam:fileSize "182 KB"`

Previous work on a mapping from RDA to BIBFRAME showed there is no immediately obvious way to treat these technical details in BIBFRAME when mapping directly from RDA. This situation differs from MARC encoding of carrier technical details, where they are part of MARC fields that have a more obvious mapping.

This proposal describes a way to treat carrier technical details in BIBFRAME using existing properties and classes. While it focusses on carrier details in RDA, it should work with other cataloging codes.

Proposal

The proposal is to use the existing property `bf:carrierCategory`. In addition to using this BIBFRAME property for carrier type (e.g. `rdam:carrierType`), it would also be used for other kinds of carrier information.

When `bf:categoryValue` contains a literal, information on the kind of carrier information is supplied in `bf:categoryType` and optionally `bf:categorySource`. When a schema exists for a type of carrier information, a URI may be used instead of a literal, and `bf:categoryType` and `bf:categoryScheme` are not needed, since this information is provided by the schema.

For example, a film reel in Cinerama format is coded as:

```
ex:resource1 bf:carrierCategory [  
  a bf:Category ;
```

```
bf:categoryValue "film reel" ;
bf:categoryType "carrier type" ;
bf:categorySource "RDA rule 3.3.1.3" ],
    [
a bf:Category ;
bf:categoryValue "Cinerama" ;
bf:categoryType "presentation format" ;
bf:categorySource "RDA rule 3.17.2.3" ].
```

Examples

Further examples of carrier technical details (not including the corresponding carrier type):

```
bf: carrierCategory [
    a bf: Category ;
    bf:categoryValue "metal" ;
    bf:categoryType "base material" ;
    bf:categorySource "RDA rule 3.6.1.3" ].
```

```
bf: carrierCategory [
    a bf:Category ;
    bf:categoryValue "On brass stand" ;
    bf:categoryType "details of mount" ;
    bf:categorySource "RDA rule 3.8.1.4" ].
```

```
bf: carrierCategory [
    a bf:Category ;
    bf:categoryValue "tactile silk screen print" ;
```

bf:categoryType "production method for tactile resources" ;
bf:categorySource "RDA rule 3.9.3.3"].

bf: carrierCategory [
 a bf:Category ;
 bf:categoryValue "tape duplication master" ;
 bf:categoryType "generation of audio recordings" ;
 bf:categorySource "RDA rule 3.10.2.3"].

bf: carrierCategory [
 a bf:Category ;
 bf:categoryValue "bar over bar" ;
 bf:categoryType "layout" ;
 bf:categorySource "RDA rule 3.11.1.3"].

bf: carrierCategory [
 a bf:Category ;
 bf:categoryValue "Font size varies from 18 point to 20 point" ;
 bf:categoryType "details of font size" ;
 bf:categorySource "RDA rule 3.13.1.4"].

bf: carrierCategory [
 a bf:Category ;
 bf:categoryValue "9.5 cm/s" ;
 bf:categoryType "playing speed" ;
 bf:categorySource "RDA rule 3.16.4.3"].

bf: carrierCategory [
 a bf:Category ;

bf:categoryValue "Soft sectored" ;
bf:categoryType "details of digital file characteristic"
bf:categorySource "RDA rule 3.19.1.4"].

bf: carrierCategory <<http://rdaregistry.info/termList/RDABaseMaterial/1004>> .

Approaches Not Taken

bf:note

While it is tempting to put carrier technical details in bf:note, the result is not good linked data. A data value alone is not sufficient to convey the meaning of the carrier detail, e.g.

bf:note "wood" .

One could provide a text string as a prefix, which is easily interpreted by humans but not by machines:

bf:note "Mount: wood" .

Classes

The current approach to BIBFRAME is to create classes for type information. It would be possible to create a new class, bf:Carrier, and subclasses for specific kinds of information, e.g. bf:BaseMaterial. However, this would entail a large number of subclasses: 79 if one were created for each kind of information in RDA. Even if "details of" properties were mapped to bf:note, 43 classes would still be required.

Extensions

It would be possible to use properties from other schemes to extend BIBFRAME for carrier technical details. However, the task is not easy. Carrier details in RDA are not contained in a small number of other schemes, and the research and expertise required to sort through them is great. And the result would not be an expression of this information within BIBFRAME itself.