**Process Notes – v1.7, 10/21/2021**

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**Process 0 - Name and Title Processing**

**0.1) Name and name/title field components**

Name part: all subfields before $t except $e, $4, $h, $i, $j (X11)

Role part: $e, $4, $j (X11)

Title part: all subfields after $t except $h,v,x,y,z,w,0-8

Series part: $v (8XX), $x (7XX, 8XX)

Genre part: $h

Relationship part: $i (7XX)

**0.2) Relationship components**

If 1XX, then name/title is the resource being described

If 6XX, then relationship is bf:subject (see ConvSpec-600-662…)

If 700-730 and no subfield $i is present, then

If I2=2, relationship is bf:hasPart

Else relationship is bf:relatedTo

If $i is present, then carry over $i content using bflc:relation property (see Process 0.3.3)

If 8XX, then relationship is bf:hasSeries (see Process 6)

If 760-788, then

Relationship determined by tag and Ind 1 (see ConvSpec760-788-Links …)

If also have $i, then carry over $i content using bflc:relation property (see Process 0.3.3)

**0.3) Basic RDF Patterns for Names, Titles, and Relationships**

**0.3.1) RDF for names**

<resource> bf:contribution [ a bf:Contribution ;

bf:agent [ a bf: Person, Organization, Meeting, Family or Jurisdiction

rdfs:label “label from **Process 1.3**”;

identifiedBy [ a Identifier ….. ]; see **Subfield $0 spec**

bflc:nameXXMatchKey “string from **Process 1.1**”;

bflc:nameXXMarcKey “string from **Process 1.2**” ] ;

bf:role [ a bf:Role

[rdfs:label “…” ]; see **Process 1.4**

bf:code “…” ] ]. see **Process 1.4**

If URI from ID for role, then instead:

bf:role URI for role

If name is from 1XX:

Use bflc:PrimaryContribution instead of bf:Contribution

**0.3.2) RDF for titles**

Construct Title class from title subfield; keep Title subproperties in same order as in field.

bf:Work bf:title [ a bf:Title

bf:mainTitle “content of $a (X30, 240) or $t (X00, X10, X11)” ;

bf:partnumber “content of $n” ;

bf:partName “content of $p” ;

bflc:titleXXMatchKey “see **Process 2.1**” ;

bflc:titleXXMarcKey “see **Process 2.2**” ;

bflc:titleSortKey “see **Process 2.3**” ] .

bf:identifiedBy [ a Identifier ….. ] **see Subfield $0 spec**

Convert content of other MARC title subfields as specified in title spec; order not necessary to preserve.

**0.3.3) RDF for relationships**

<resource> bf:relatedTo\*\* URI

\*\*bf:relatedTo may instead be bf:hasPart, or bf:hasSeries, or one of the other specific relationship properties

Or if need to express also a specific relationship:

If only have relation label (from Bib 7XX $i or Auth 5XX $i):

<resource> bflc:relationship [a bflc:Relationship;

bflc:relation [a bflc:Relation;

[rdfs:label “name of relationship” ] ] .

If have relation label and/or relation URI:

<resource> bflc:relationship [a bflc:Relationship;

bflc:relation [ URI for relation;

[rdfs:label “name of relationship” ] ] ].

URI a bf:Work or bf:Instance;

identifiedBy [ a Identifier ….. ]; **see Subfield $0 spec** bflc:titleXXMatchKey “See **Process 1.1**”;

bflc:titleXXMarcKey “See **Process 1.2**”.

**Process 1 - Name Processing**

**Conversion of X00, X10, X11 names**

Note on name keys: If the fields is a name/title field, include only the subfields before the $t subfield as part of the name. A few subfields can occur in titles and names and if they are after the $t they are part of the title.

**1.1) Make the match key**

For all: Drop all indicators and subfield codes – keep order in field

X00 - abcdjq - bflc:name00MatchKey

X10 - abcdng - bflc:name10MatchKey

X11 - acdengq - bflc:name11MatchKey

**1.2) Make the marc key**

For all: Keep all indicators and subfield codes – tack tag on to beginning – keep whole field as is even if it has a title in it also -- keep order in field : tagii$atext$btext$gtext

X00 - bflc:name00MarcKey

X10 - bflc:name10MarcKey

X11 - bflc:name11MarcKey

**1.3) Make the rdfs:label**

For all: Substitute blank for each subfield code – keep order in field

X00 - abcdjq - rdfs:label

X10 - abcdng - rdfs:label

X11 - acdengq - rdfs:label

**1.4) Establish role**

MARC bibliographic records:

- If no $e (X00, X10), $j (X11) or $4, role is “contributor” and add URI from ID: <<https://id.loc.gov/vocabulary/relators/ctb>>

- If $e or $j (X11)

bf:role bf:Role rdfs:label “content of $e (X00, X10) or $j (X11)”

Note: If subfield content has “and”, &, or ”,” there are multiple roles in subfield. Separate and process each into a separate bf:role.

- If $4 (for each $4) has a three-character code

bf:role a bf:Role bf:code “content of $4”

or bf:role a bf:Role URI for role from ID

- If $4 (for each $4) contains a URI (http://...)

bf:role URI from $4

- If tag of field is 1XX, then use class bflc:PrimaryContribution for name information (see Process 0.3).

**Process 2 - Title Processing**

**Conversion of X00, X10, X11, X30, and 240 titles**

Note: for subfield strings below that start with “t” include only the subfields that occur in the heading after the $t. A few subfields may occur before and after the $t and if they occur before they are part of the name, not the title.

**2.1) Make the match key**

For all: Drop all subfield codes – keep order in field

X00 – tfgklmnoprs - bflc:title00MatchKey

X10 - tdfgklmnoprs - bflc:title10MatchKey

X11 - tfgklnps – bflc:title11MatchKey

X30 – adfgklmnoprs - bflc:title30MatchKey

240 – adfgklmnoprs - bflc:title40MatchKey

**2.2) Make the marc key**

For all: Keep all indicators and subfield codes – tack tag on to beginning – keep whole field as is even if it has a name in it also -- keep order in field – convert delimiter to $ sign: tagii$atext$btext$gtext

X00 - bflc:title00MarcKey

X10 –bflc:title10MarcKey

X11 - bflc:title11MarcKey

X30 –bflc:title30MarcKey

240 - bflc:title40MarcKey

**~~2.3) Make the rdfs:label~~**

~~For all: Substitute blank for each subfield code – keep order in field~~

~~X00 – tfgklmnoprs - rdfs:label~~

~~X10 – tdfgklmnoprs - rdfs:label~~

~~X11 - tfgklnps - rdfs:label~~

~~X30 – adfgklmnoprs – rdfs:label~~

~~240 – adfgklmnoprs – rdfs:label~~

**2.3) Make the sort string (if necessary)**

If Ind2 does not equal blank or 0, make sort string by removing the characters specified in Indicator 2 and the trailing “/” punctuation. Name new string bflc:titleSortKey

Subfields to include in the sort string (for all: Substitute blank for each subfield code – keep order in field)

X00 – tfgklmnoprs

X10 – tdfgklmnoprs

X11 - tfgklnps

X30 – adfgklmnoprs

240 – adfgklmnoprs

**Process 3 – Fields 856 and 859**

**3.1)**  If no $u in field, then nac fields 856 or 859

**3.2)** If 856/859 has $3=Table of Contents, add $u to bf:tableOfContents in Work (see ConvSpec-5XX…)

<bf:Work> bf:tableOfContents   [ a bf:TableOfContents ;

rdf:value "URL from $u"^^xs:anyURI ] ;

**3.3)**  **If 856 Ind2 = 2**

Instance – supplementaryContent – SupplementaryContent

rdf:value "URL from $u"^^xs:anyURI

note – Note – rdfs:label “content of $z”

note – Note – rdfs:label “content of $y”

note – Note – rdfs:label “content of $3”

<bf:Instance> bf:supplementaryContent   [ a bf:SupplementaryContent ;

rdf:value "URL from $u"^^xs:anyURI ;

bf:note [ a bf:Note ;

rdfs:label "note text" ] ] ;

**3.4)** **If 856 Ind2 = #, 0, 1 or 8**

URLs to convert in fields 856/859 $u:

\*.loc.gov

\*.fdlp.gov

\*.gpo.gov

\*.hathitrust.org

Do not convert other 856/859 fields with Ind2=#, 0, 1 or 8

**3.5)**  If the Instance is electronic (008/23= o or s)

Instance – hasItem -

Item – electronicLocator – rdfs:Resource

rdf:value "URL from $u"^^xs:anyURI

note – Note – “rdfs:label “content of $z”

note – Note – “rdfs:label “content of $y”

note – Note – “rdfs:label “content of $3”

If the Instance is NOT electronic

Create new Instance with title from analog instance and point to the Work,

Instance a Electronic

- link to the Work

- hasItem -

Item – electronicLocator – rdfs:Resource

rdf:value "URL from $u"^^xs:anyURI

note – Note – rdfs:label “content of $z”

note – Note – rdfs:label “content of $y”

note – Note – rdfs:label “content of $3”

<bf:Instance> bf:hasItem [ a bf:Item ;

bf:electronicLocator [ a rdfs:Resource ;

rdf:value "URL from $u"^^xs:anyURI ;

bf:note [ a bf:Note ;

rdfs:label “note text” ] ] ];

**Process 4 - Authority 4XX and 5XX tags**

**4.1) Authority 4XX**

Tags 400, 410, 411 without $t (only a name)

* Process using Process 1 and Process 0 (names part) as applicable to make matching keys and then process like bib 1XX and make W – contribution.

(In other words just treat it like a bib 7XX that is a name, not a name/title.) If no role in MARC data then add role <<https://id.loc.gov/vocabulary/relators/ctb>>

Tags 400, 410, 411 with $t or 430

* Separate the part before the $a (name part) and the part after and including the $t (title part); for 430, the title part is all after the $a.
* Create a bflc:nameXXMatchKey with the name part before the $t. (Ignore for 430)
* Compare it to the bflc:nameXXMatchKey made for the 1XX. (Ignore for 430)
* If match then discard name part.
* Treat title part like a variant title: W – title – VariantTitle
* See ConvSpec-240,X30 … to process variant title parts
* If have name part but it does **not** match the 1XX name part, process like a 4XX and add <<https://id.loc.gov/vocabulary/relators/ctb>> URI

**4.2) Authority 5XX**

Tags 500, 510, 511 without $t (only a name)

* Process using Process 1 and Process 0 (names part) as applicable to make matching keys and then process like bib 1XX and make W – contribution

Tags 500, 510, 511 with $t

* Separate the data between $a and $t (name part) and the data after and including the $t (title part)
* Process the data beginning with $a using Process 1.1, 1.2, 1.3, 1.5 to make matching keys and then process name parts using ConvSpec-1XX,7XX,8XX-Names …
* If have name part, process like a bib 7XX and add <<https://id.loc.gov/vocabulary/relators/ctb>> URI
* Process data after the $t using Process 2 to make matching keys and process title parts using ConvSpec-240,X30 …
  + To determine the relationships, see Process 0.3.3, “RDF for relationships”
  + Relationship information in $i is converted with title, see Process 0.3.3, “RDF for relationships”
  + If 500, 510, 511 tag does not have $i, examine $w/0
    - If $w/0=f, create W –derivativeOf – W
    - If 500, 510, 511 tag does not have $i and $w/0 does not=f, create W – relatedTo -- W

Tag 530

* Process data after $a using Process 2 to make matching keys and process title parts using ConvSpec-240,X30 …
  + To determine the relationships, see Process 0.3.3, “RDF for relationships”
  + If 530 tag has $i, create

bflc:relationship [a bflc:Relationship ;

bf:relatedTo <related W uri>

bflc:relation rdfs:label “content of $i”

* + If 530 tag does not have $i, examine $w/0
    - If $w/0=f, create W – derivativeOf – W
    - If 530 tag does not have $i or $w/0=f, create W – relatedTo – W

**Process 5 - Selecting Name/Title and Title Authority**

**5.1) Record selection**

Select records to process from the Names file

- If 130 – select

- If 100, 110, 111 have $t – select

**5.2) Missing conversion**

Stash any FIELD that occurs in a record and does not get a convert as follows:

bflc:missingConversionSpec – literal (marc field with tag and indicators and subfields)

**5.3) Notes**

- There is no clear way to identify a serial or integrating resource.

- Approximate number of title and name/title records in the LC Authority file (2017) 1,256,426, (2016) 1,178,841, and (2012) 1,055,887

- To identify Series records within the selected records: 008/16 = a

Additional check: 008/12 not=n; 008/13 not=n

**Process 6 - Series Processing**

**6.1)** For the conversion of tag 4900\_, see ConvSpec-490,510,530-535-Links …

**6.2)** If there are more than one 4901\_/8XX groupings, pair them and assume they are in the same order, i.e., first 490 goes with first 8xx, etc. Data from the 490 tag may be needed for steps 6.4 or 6.5

**6.3)** ISSNs may be located in 8xx $x or 490 $x -- the 490 and/or the 8xx tag may have the ISSN ($x) so get it from either.

**6.4)** For each 400/410/411/800/810/811 tag, create the following:

Work hasSeries Work

bf:contribution/bf:Contribution agent construct See Process 1.3

bf:title/bf:Title bf:maintitle See Process 2

rdfs:label All subfields less $v, $w, $x, and $0-8, separated by

space, keep order in field

identifiedBy Issn rdf:value $x or 490 $x (if necessary)

identifiedBy Lccn rdf:value 8xx-w if $w begins with (DLC)

Also add ## - assigner - Agent - http://id.loc.gov/vocabulary/organizations/dlc

identifiedBy Identifier rdf:value 8xx-w if $w does not begin

with (DLC)

Also add ## - assigner - Agent - bf:code $w data in parentheses

If $3 exists, use Subfield $3 Process

**6.5)** For each 440 or 830 tag, create the following:

Work hasSeries Work

bf:title/bf:Title bf:maintitle See Process 2

rdfs:label All subfields less $v, $w, $x, and $0-8, separated by

space, keep order in field

identifiedBy Issn rdf:value $x or 490 $x (if necessary)

identifiedBy Lccn rdf:value 8xx-w if $w begins with (DLC)

Also add ## - assigner - Agent - http://id.loc.gov/vocabulary/organizations/dlc

identifiedBy Identifier rdf:value 8xx-w if $w does not begin

with (DLC)

Also add ## - assigner - Agent - bf:code $w data in parentheses

If $3 exists, use Subfield $3 Process

**6.6)** If a MARC record has a 490 tag with a $x (ISSN), and no corresponding 8XX tag, create a Work – hasSeries – Work structure as outlined in step 6.5

**6.7)** If a MARC record only has 8xx tags, add to the Instance:

bf:seriesStatement literal concatenate all subfields less $w, $x, $0-8, separated by space, keep order in field

**Process 7 - Punctuation Retention and Removal**

Dealing with punctuation embedded in cataloged bibliographic records is an inexact science. In general, for rdfs:label elements, punctuation is retained as found in the source. For other data elements, ending punctuation may or may not be removed. The conversion follows the [PCC Guidelines for Minimally Punctuated MARC Records](https://loc.gov/aba/pcc/documents/PCC-Guidelines-for-Minimally-Punctuated-MARC-Data-v.1.2.docx) where applicable. Specific guidelines are outlined below.

**7.1)** When a single MARC field is split into multiple BIBFRAME properties or classes, remove the punctuation between each subfield.

Examples:

**245 10** **$a** Title of resource : **$b** subtitle of resource / **$c** author of resource.

bf:title [ a bf:Title ;

bf:mainTitle "Title of resource" ;

bf:subtitle "subtitle of resource" ] .

bf:responsibilityStatement "author of resource" ;

**264 1** **$a** New York : **$b** HarperCollins, **$c** 2020.

bf:provisionActivity [ a bf:Publication ;

bf:agent [ a bf:Agent ;

rdfs:label "HarperCollins" ] ;

bf:date "2020" ;

bf:place [ a bf:Place ;

rdfs:label "New York" ] ] ;

**300** **$a** 50 pages ; **$c** 24 cm.

bf:extent [ a bf:Extent ;

rdfs:label "50 pages" ] ;

bf:dimensions "24 cm." ;

**700 10** **$a** Miranda, Lin-Manuel, **$d** 1980-, **$e** composer, **$e** librettist, **$e** performer.

bf:agent [ a bf:Agent ;

rdfs:label "Miranda, Lin-Manuel, 1980-" ;

bf:role [ a bf:Role ;

rdfs:label "performer" ],

[ a bf:Role ;

rdfs:label "librettist" ],

[ a bf:Role ;

rdfs:label "composer" ],

[ a bf:Role ;

rdfs:label "lyricist" ] ],

**7.2)** When a MARC field is placed in a single BF property, retain the punctuation between each subfield.

Examples:

**264 1** **$a** New York : **$b** HarperCollins, **$c** 2020.

bf:provisionActivityStatement "New York : HarperCollins, 2020" ;

**490 0** **$a** IEEE digital and mobile communications series ; **$v** 1

bf:seriesStatement "IEEE digital and mobile communications series ; 1" ;

**7.2.1)** When creating a bf:responsibilityStatement from MARC field 245 $c, retain punctuation within the text string.

Example:

**245 10** **$a** Salt, fat, acid, heat : **$b** mastering the elements of good cooking / **$c** by Samin Nosrat and art by Wendy MacNaughton ; with a foreword by Michael Pollan.

bf:responsibilityStatement "by Samin Nosrat and art by Wendy MacNaughton ; with a foreword by Michael Pollan " ;

**7.2.2)** When converting note fields that contain multiple sentences, retain punctuation.

Examples:

**351** **$a** Part I arranged in three series. Series 1: 1 Early Family Papers, 1762-1910; Series 2: General Correspondence, 1934-1964; Series 3: Special Correspondence, 1946-1963.

bf:collectionArrangement [ a bf:CollectionArrangement ;

bf:collectionOrganization “Part I arranged in three series. Series 1: 1 Early Family Papers, 1762-1910; Series 2: General Correspondence, 1934-1964; Series 3: Special Correspondence, 1946-1963.” ] ;

**506** **$a** Use digital image. Original served only by appointment because material requires special handling.

bf:usageAndAccess [ a bf:AccessPolicy ;

rdfs:label "Use digital image. Original served only by appointment because material requires special handling.” ] ;

**7.2.3)** When creating a bf:qualifier for a bf:AbbreviatedTitle or a bf:KeyTitle from MARC fields 210 $b and 222 $b, retain the parentheses around the qualifying information.

Examples:

**210 0 $a** Br. j. hist. math. **$b** (Online)

bf:title [ a bf:AbbreviatedTitle ;

bf:mainTitle "Br. j. hist. math." ;

bf:qualifer "(Online)" ] .

**222 0 $a** Economic education bulletin **$b** (Great Barrington)

bf:title [ a bf:KeyTitle ;

bf:mainTitle "Economic education bulletin" ;

bf:qualifer "(Great Barrington)" ] .

**7.3)** Square brackets should be retained, as they are used to indicate cataloger-supplied and non-transcribed metadata.

Examples:

**245 10** **$a** [Charles and Ray Eames, designers, looking at the chair at their office] / **$c** [edited by] Hanna Garth and Ashanté M. Reese.

bf:title [ a bf:Title ;

bf:mainTitle "[Charles and Ray Eames, designers, looking at the chair at their office]" ] .

bf:responsibilityStatement “[edited by] Hanna Garth and Ashanté M. Reese” ;

**250** **$a** [Explicit edition].

bf:editionStatement "[Explicit edition]" ;

**264 2** **$a** [New York] : **$b** [Buena Vista Home Entertainment], **$c** 2019.

bf:provisionActivity [ a bf:Distribution ;

bf:agent [ a bf:Agent ;

rdfs:label "[Buena Vista Home Entertainment]" ] ;

bf:date "2019" ;

bf:place [ a bf:Place ;

rdfs:label "[New York]" ] ] ;

**7.4**) Final punctuation (usually a period) should be removed from most 01X-4XX and 65X-8XX fields, but retained in fields 210, 222, 300 and the 5XX fields.

Examples:

**250** **$a** First edition.

bf:editionStatement "First edition" ;

**264 1** **$a** New York : **$b** HarperCollins, **$c** 2020.

bf:provisionActivityStatement "New York : HarperCollins, 2020" ;

**500** **$a** Includes index.

bf:note [ a bf:Note ;

rdfs:label "Includes index." ] ;

**650 0** **$a** Baseball players **$v** Drama.

bf:subject [ a bf:Topic ;

rdfs:label “Baseball players--Drama" ] ;

**655 7** **$a** Motion pictures.

bf:genreForm [a bf:GenreForm ;

rdfs:label “Motion pictures” ] ;